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A Survey of International Intergovernmental Organizations: The Strategies That They Use To Abate Pollution

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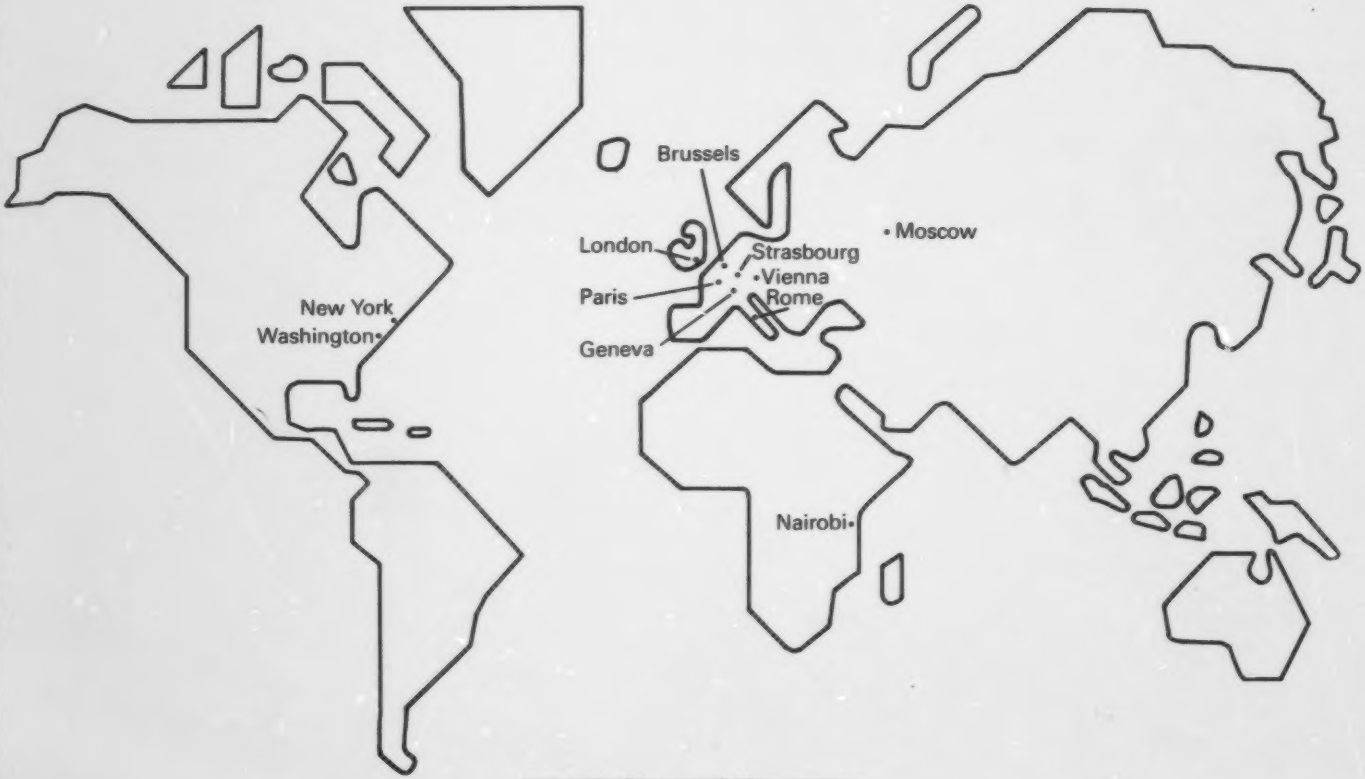

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16. ABSTRACT

A handbook for those people involved in ~~and being introduced to~~ international environmental administration and assistance ~~has been unavailable to date.~~ This survey serves as such a handbook, addressing international intergovernmental organizations and the strategies they use to abate pollution.

→ the handbook major for (these organizations)

~~It~~ addresses 16 international organizations and the Law of the Sea Conference. and provides a ranking of organizations based on their potential effectiveness in abating pollution. ~~The report surveys~~ → the background and structure of and the strategies used they ~~by each organization~~. A bibliography for each organization and a general bibliography are also provided. ← end

are examined.

→ The organizations selected are those with which the U.S. Environmental Protection Agency has some continuing contact. The organizations are presented in order of their potential effectiveness to abate →

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a. DESCRIPTORS		b. IDENTIFIERS/OPEN ENDED TERMS	c. COSATI Field/Group
Developing countries	Multilateral agreements	Pollution abatement	
Environment	Management	Strategies	
Earth atmosphere	Administrative law	Environmental administration	
Earth hydrosphere	Agreements	Environmental assistance	
Geography	Leadership	Industrialized democracies	
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A SURVEY OF INTERNATIONAL INTERGOVERNMENTAL ORGANIZATIONS: THE STRATEGIES THAT THEY USE TO ABATE POLLUTION

by

Melvin L. Myers

This survey was conducted during
a training program at
Indiana University
Bloomington, Indiana 47401

OFFICE OF RESEARCH AND DEVELOPMENT
U.S. ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

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PREFACE

This survey was completed while I was at Indiana University participating in a long-term training program sponsored by the U.S. Environmental Protection Agency. Professor Edward Buehrig of the Department of Political Science was my mentor for the first phase of the work accomplished in the latter part of 1976. In that phase, nine international organizations and the Law of the Sea Conference were studied. The second phase addressed seven more organizations and was completed during the first part of 1977 under the guidance of Professor Lynton K. Caldwell of the Department of Political Science and the School of Public and Environmental Affairs. This second phase also added depth to the earlier material. Dr. Jack E. Thompson, Director of the International Organizations and Western Hemisphere Division in the U.S. Environmental Protection Agency, has been a valuable source of information for this survey.

International intergovernmental organizations are surveyed in this report as policy instruments for abating pollution. Three other important policy instruments are available: nongovernmental organizations, bilateral arrangements, and transnational corporations. Companion surveys of these other instruments would also be useful as handbooks for the international environmental administrator.

Melvin L. Myers
July 1978

EXECUTIVE SUMMARY

As a result of this survey, no conclusions can be drawn concerning the effectiveness of international organizations in abating pollution. Available information concentrates only on contributions and activity, not on results and effectiveness. There are indications, however, that at the scientific level within organizations, such as the World Meteorological Organization, the research objectives are met. The scientific infrastructure of these organizations may very well be a foundation for establishing environmental objectives that drive international legal structures. Moreover, this foundation is evident in practically every organization surveyed as well as in the United Nations Law of the Sea Conference.

The effectiveness of international organizations is addressed in a U.S. Senate document entitled U.S. Participation in International Organizations. This document states that none of 32 international organizations with a budget under $2 million have had outside evaluations except for financial audits by accounting firms, but about half of 33 international organizations with a budget over $2 million have had outside evaluations exclusive of financial audits. The most conspicuous organizations having these evaluations are those concerned with banking, such as the World Bank. Also, to independently evaluate its programs, the United Nations Educational, Scientific, and Cultural Organization (UNESCO) has recently established a post of Inspector-General.

The U.S. Senate document also reports some effort on the part of international organizations to evaluate their effectiveness internally. The World Health Organization (WHO), Pan American Health Organization (PAHO), and Food and Agriculture Organization are among these. There is little evidence, however, of evaluations of headquarters operations as distinct from field operations. Then too, any internal evaluation may suffer from the lack of objectivity.

The United States, under Public Law 93-189, is pushing the United Nations for independent evaluations of the effectiveness of their programs. Measurable objectives for such evaluations are being pursued by WHO, UNESCO, the United Nations Environment Program, and the International Labor Organization. Quite apart from formal actions, the Senate document concluded that there is no review of the programs of international organizations by a "watchdog" institution such as the "press," thus allowing members of the general public to make their own evaluations.

ABSTRACT

A handbook for people involved in and being introduced to international environmental administration and assistance has been unavailable to date. This survey serves as such a handbook, addressing international intergovernmental organizations and the strategies they use to abate pollution.

It addresses 16 international organizations and the Law of the Sea Conference and provides a ranking of organizations based on their potential effectiveness in abating pollution. The report surveys the background and structure of and the strategies used by each organization. A bibliography for each organization and a general bibliography are also provided.

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I

OVERVIEW

This document is a survey of international intergovernmental organizations and their strategies for abating pollution. It is designed for use as a handbook for those people involved in and being introduced to international environmental administration and assistance.

The survey addresses 16 major international organizations and the Law of the Sea Conference. The organizations selected are those with which the U.S. Environmental Protection Agency has some continuing contact. Five organizations which could have been included but were not because of time constraints in completing this survey are the International Civil Aviation Organization, the Nordic Council, the International Organization for Legal Metrology, the International Standards Organization, and the Organization for African Unity. The relationship of these and other international organizations to the United Nations (UN) is displayed in Figure 1; the membership of the UN is geographically shown in Figure 2.

The organizations are presented in order of their potential effectiveness to abate transnational pollution. As can be seen in Table 1, this ordering is based on judgements drawn from among four tenets. These tenets were derived from conclusions of Kennan (1970 and 1972) and guidelines of Blake. They are:

- Consider organizations with a small number of member nations first, for agreement and action are reached less effectively in international organizations with a large number of members where national interests are numerous.
- Consider organizations that represent industrialized and maritime nations first, for they are the primary source of pollution and have the means to abate pollution.
- Consider organizations unaffiliated with the UN first, for the UN's voting power is swayed away from pollution abatement in the interest of economic development.
- Consider organizations that represent the industrialized democracies before organizations that represent the Soviet Union and the socialist nations and these, in turn, before organizations that represent the developing nations, for this is the ranking of interest in pollution abatement.

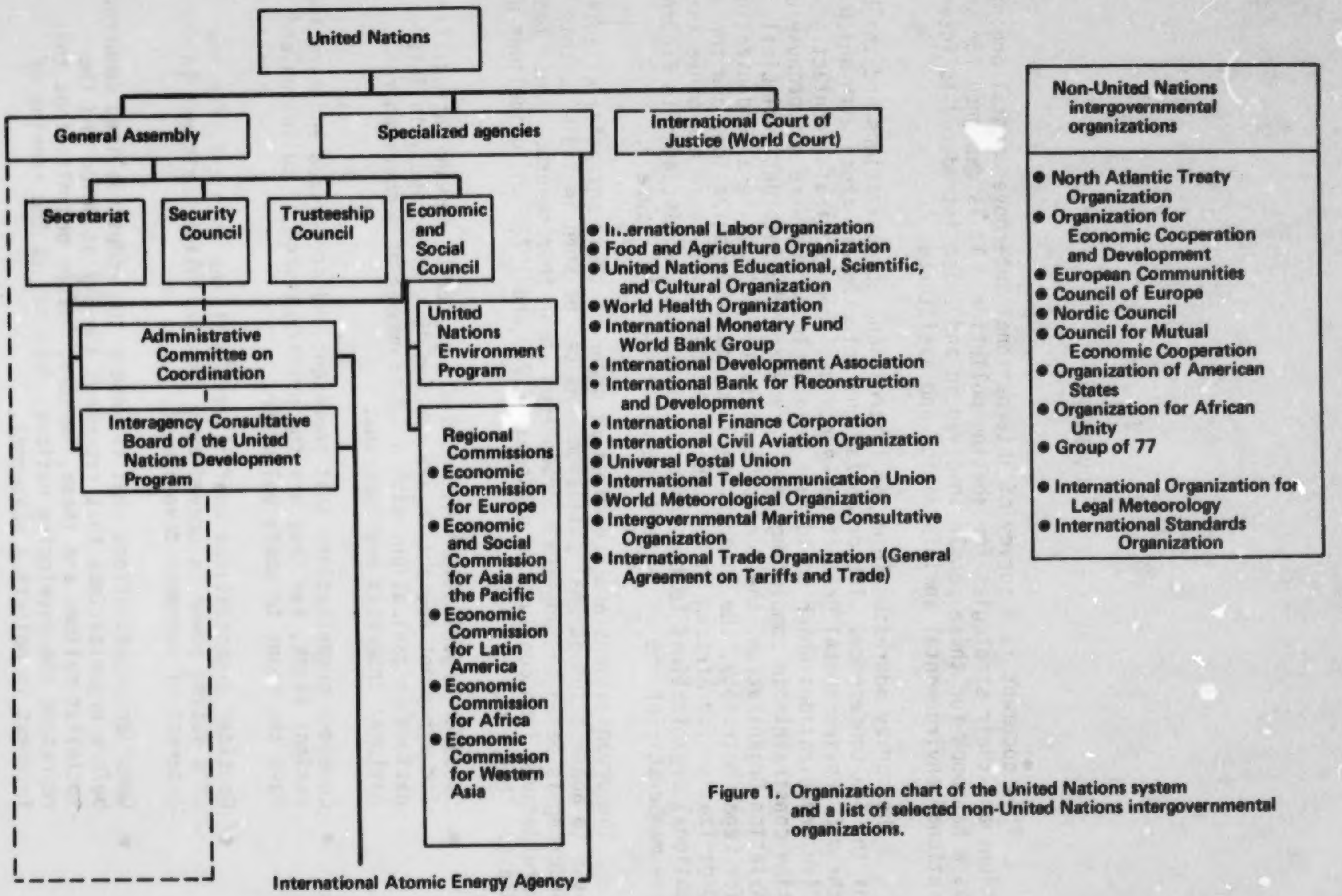
United Nations
General Assembly
Specialized agencies
International Court of Justice (World Court)
Secretariat
Security Council
Trusteeship Council
Economic and Social Council
Administrative Committee on Coordination
Interagency Consultative Board of the United Nations Development Program
United Nations Environment Program
Regional Commissions
● Economic Commission for Europe
● Economic and Social Commission for Asia and the Pacific
● Economic Commission for Latin America
● Economic Commission for Africa
● Economic Commission for Western Asia
International Atomic Energy Agency
● International Labor Organization
● Food and Agriculture Organization
● United Nations Educational, Scientific, and Cultural Organization
● World Health Organization
● International Monetary Fund
World Bank Group
● International Development Association
● International Bank for Reconstruction and Development
● International Finance Corporation
● International Civil Aviation Organization
● Universal Postal Union
● International Telecommunication Union
● World Meteorological Organization
● Intergovernmental Maritime Consultative Organization
● International Trade Organization (General Agreement on Tariffs and Trade)
Non-United Nations intergovernmental organizations
● North Atlantic Treaty Organization
● Organization for Economic Cooperation and Development
● European Communities
● Council of Europe
● Nordic Council
● Council for Mutual Economic Cooperation
● Organization of American States
● Organization for African Unity
● Group of 77
● International Organization for Legal Meteorology
● International Standards Organization

Figure 1. Organization chart of the United Nations system and a list of selected non-United Nations intergovernmental organizations.

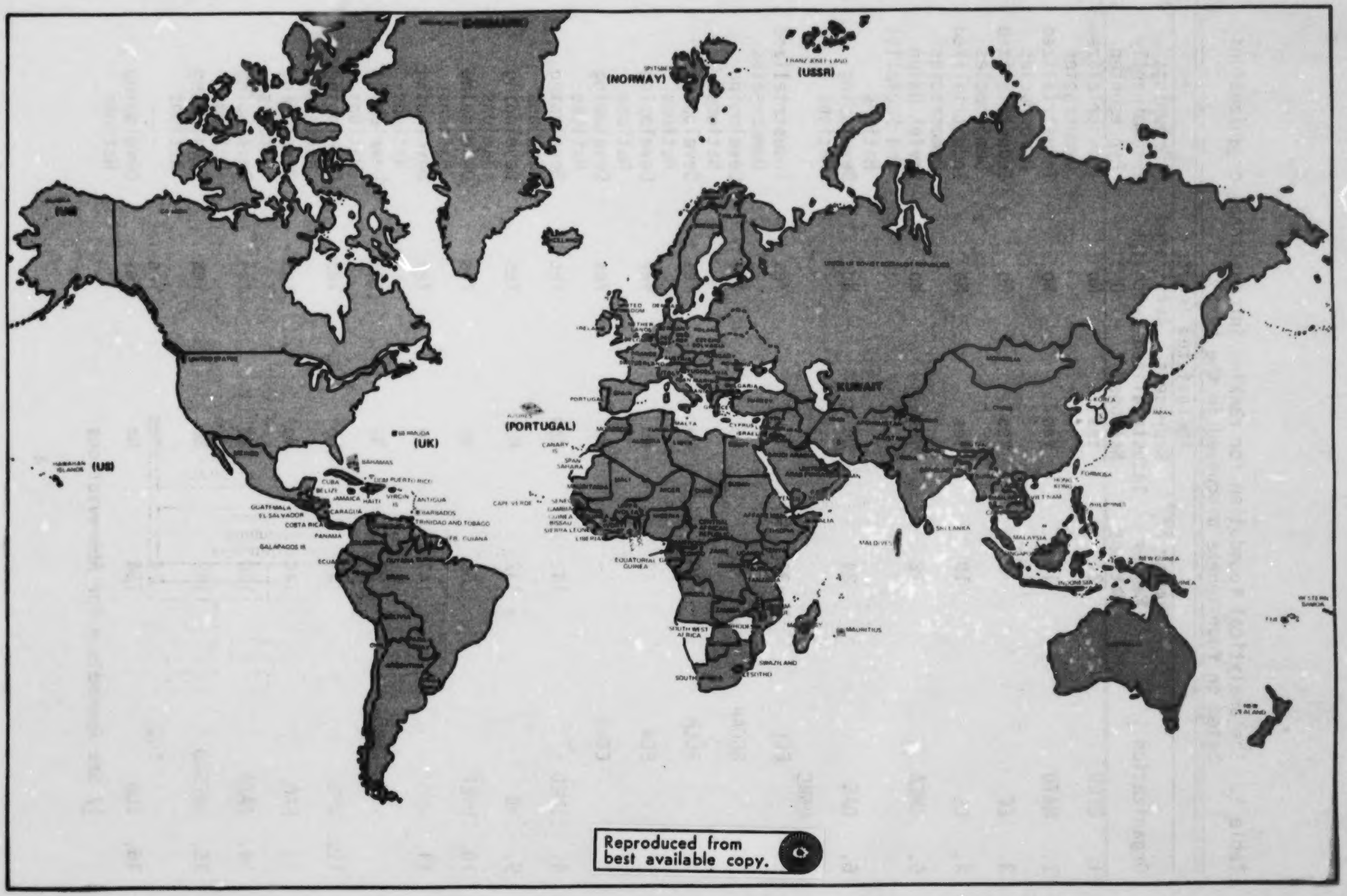

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Figure 2. The shaded portion shows the 149 member nations of the United Nations as of January 1978.

Table 1. The analytical foundation for ranking international organizations based on four tenets discussed in the text

		Abbreviated Tenets		
Organization 1/	Number of Member Nations	Represent Industrialized Nations?	Affiliated with the UN?	Groupings Predominantly Represented
1. OECD	24	Yes	No	Industrialized Democracies
2. NATO	15	Yes	No	Industrialized Democracies
3. EC	9	Yes	No	Industrialized Democracies
4. CE	18	Yes	No	Industrialized Democracies
5. CMEA	12	Yes	No	Soviet Union and Socialist Nations
6. OAS	24	No	No	Developing Nations
7. UNRC				
ECE	34	Yes	Yes	Industrialized Democracies
ESCAP	32	No	Yes	Developing Nations
ECLA	30	No	Yes	Developing Nations
ECA	42	No	Yes	Developing Nations
ECWA	-	No	Yes	Developing Nations
8. IMCO	142	Yes	Yes	Developing Nations
9. WB	132	No	Yes	Developing Nations
10. UNEP	58	No	Yes	Developing Nations
11. WHO	147	No	Yes	Developing Nations
PAHO	27	No	Yes	Developing Nations
12. WMO	147	No	Yes	Developing Nations
13. FAO	144	No	Yes	Developing Nations
14. IAEA	110	No	Yes	Developing Nations
15. UNESCO	142	No	Yes	Developing Nations
IOC	74	Yes	Yes	----
16. ILO	134	No	Yes	Developing Nations

1/ See Appendix A for Abbreviations

These tenets also provide the basis for aggregating three groupings of international organizations. These are the industrial democracies, the Soviet Union and the socialist nations, and the developing nations.

The industrial democracies are best represented by the Organization for Economic Cooperation and Development (OECD); member nations of this organization are shown in Figure 3. The Soviet Union and socialist nations grouping is best depicted by the Council for Mutual Economic Assistance (CMEA), shown geographically in Figure 4. The developing nations are best depicted by the Group of 77, illustrated geographically in Figure 5. These three groupings set the stage for analyzing strategies for abating pollution.

Four strategies used in abating pollution by the international organizations surveyed are shown in Table 2. These strategies are legislative enactment, adjudication, cultivation of understanding and attitudes, and rendering benefits.[1]

> Legislative enactment is a strategy in which the law-making body of a nation or an international organization takes official action. This action ranges from establishing budgets to making treaties or declarations. Nine organizations surveyed use this strategy. It appears that legislative enactment may be an important peer pressure strategy among the industrial democracies for abating pollution. Commitments by industrialized democracies carry an apparent impetus for direct action and results.
>
> Adjudication is a strategy in which a judicial body of a nation or international organization decides upon cases of territorial jurisdiction or legislative enactment. National courts may apply international law based on customary law or treaty obligations or on national legislation that is consistent with international law. When international courts such as the UN's International Court of Justice are used, all parties normally need to be willing participants. Otherwise, the decisions lack the power of enforcement. The European Communities, better known as the Common Market, is the only organization surveyed that uses this strategy.
>
> The cultivation of understanding and attitudes is a strategy to establish awareness of an issue by nations and nationals. This strategy may be implemented by means of conferences and educational programs. Thirteen organizations surveyed cultivate understanding and attitudes. It also appears that the cultivation of understanding and attitudes may be the appropriate strategy for cooperation with the Soviet Union and other socialist nations. This cooperation is manifested more in bilateral interactions such as détente than by international organizations, although the CMEA is cooperating in conferences with the UN, European organizations, and individual nations.

[1] Three other strategies not used by international organizations in abating pollution and not discussed here are territorial jurisdiction, mediation, and coercion (Buehrig, 1976).

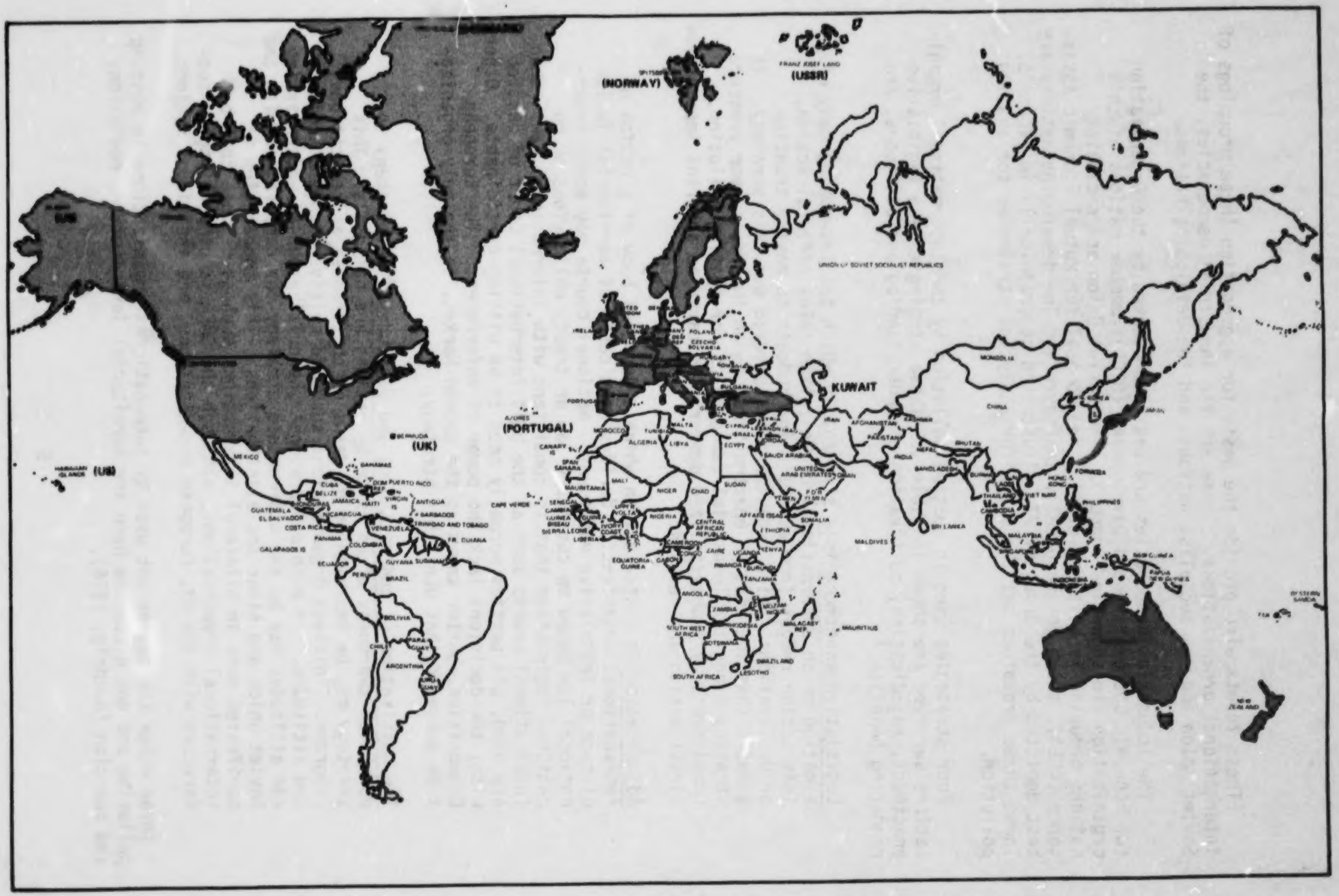

Figure 3. The shaded portion shows the 24 member nations of the Organization for Economic Cooperation and Development as of January 1978.

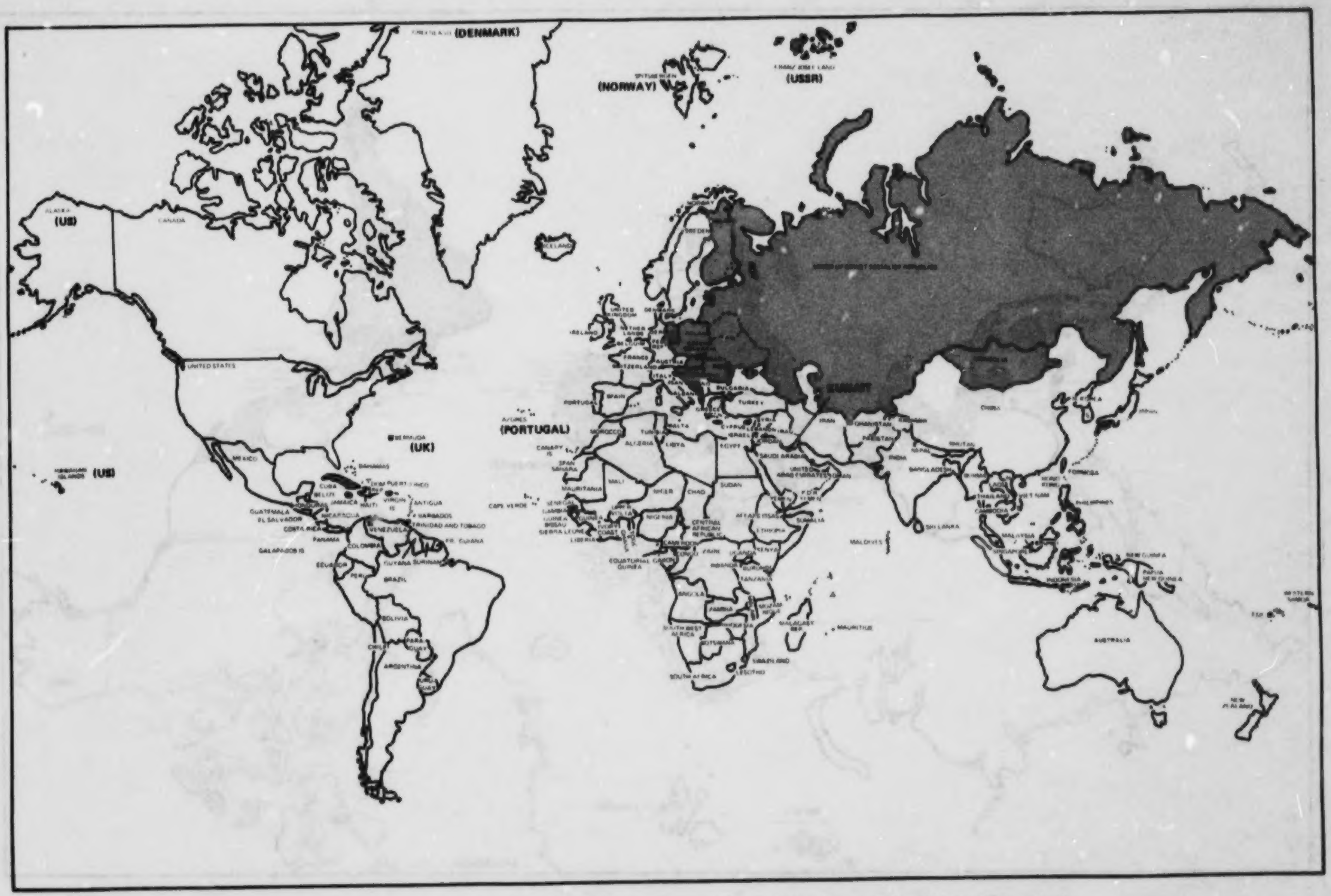

Figure 4. The shaded portion shows the 12 member nations of the Council for Mutual Economic Assistance as of 1975.

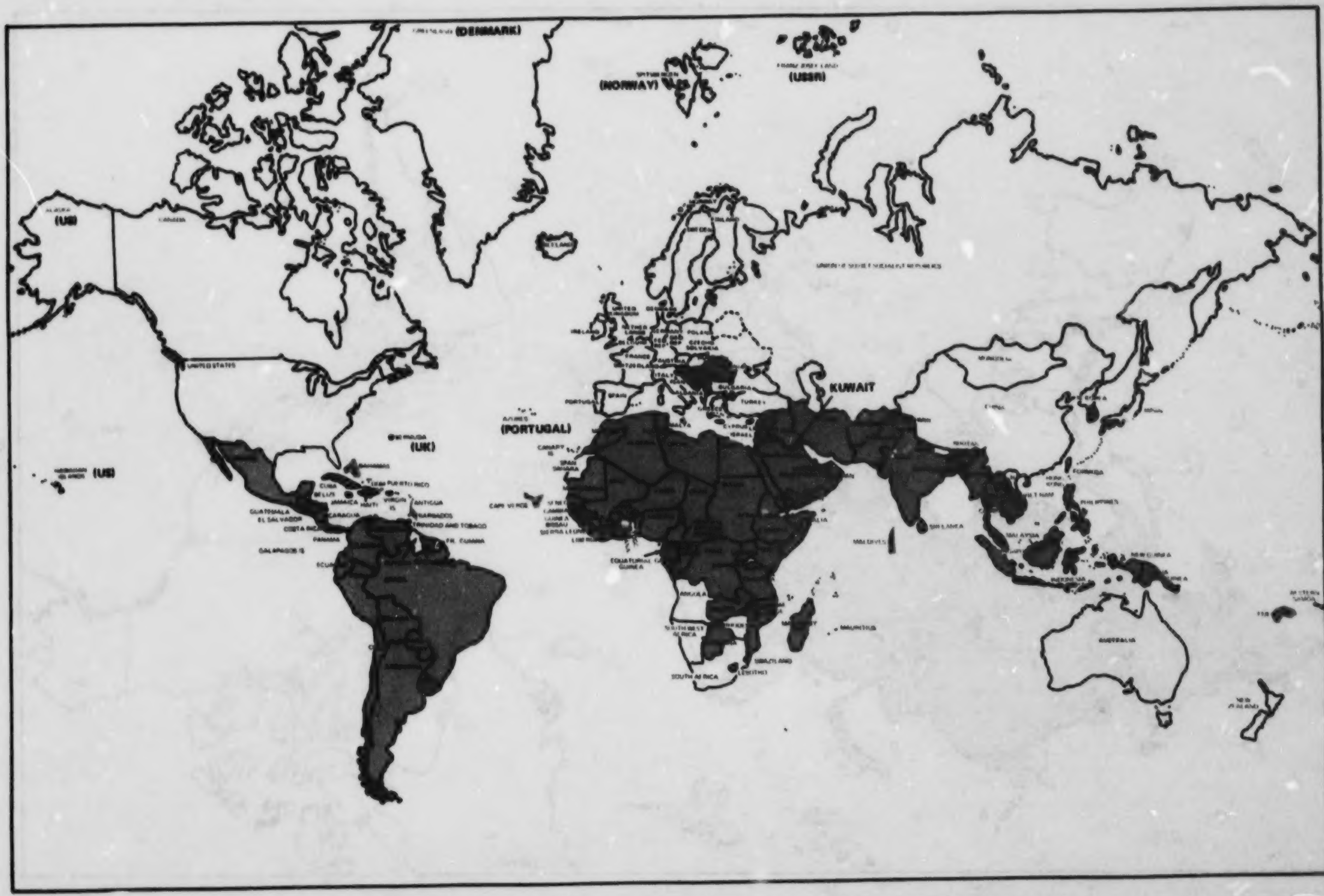

Figure 5. The shaded portion shows the Group of 77, which are signatories of the Treaty of Algiers as of April 1976.

Table 2. Pollution-abating strategies used by each international organization addressed in this survey

International organization 1/	Strategy			
	Legislative enactment	Adjudication	Cultivation of understanding and attitudes	Rendering benefits
OECD 2/	x		x	x
NATO 3/			x	
EC 4/	x	x	x	x
CE 5/	x		x	x
CMEA 6/	x		x	x
OAS 7/				x
UNRC 8/			x	x
IMCO 9/	x			
WB 10/				x
UNEP 11/	x		x	x
WHO 12/			x	x
WMO 13/			x	x
FAO 14/	x		x	x
IAEA 15/	x		x	x
UNESCO 16/			x	
ILO 17/	x		x	

1/ Listed in order of priority for effecting pollution abatement
2/ Organization for Economic Cooperation and Development
3/ North Atlantic Treaty Organization
4/ European Communities
5/ Council of Europe
6/ Council for Mutual Economic Assistance
7/ Organization of American States
8/ UN Regional Commissions
9/ Intergovernmental Maritime Consultative Organization
10/ World Bank Group
11/ UN Environment Program
12/ World Health Organization
13/ World Meteorological Organization
14/ Food and Agriculture Organization
15/ International Atomic Energy Agency
16/ UN Educational, Scientific, and Cultural Organization
17/ International Labor Organization

Rendering benefits is a strategy in which a nation and its nationals receive an advantage from a service provided by an international organization. This service can be discretionary (e.g., providing a loan) or nondiscretionary (e.g., providing a weather report). Twelve organizations surveyed render benefits. It appears that rendering benefits is the appropriate strategy to use with the developing nations. Discretionary benefits in the form of loans may be an effective tool in preventing environmental problems. The loans are contingent on proper environmental and public health precautions, thus providing for an assessment of the environmental impact of a development action and the basis for preventive action.

Drawing from these tenets, groupings, and strategies, one can establish a hierarchy of national priorities for the international administration of pollution abatement. First, we could emphasize direct action through organizations representing the "industrial democracies" by using legislative enactment and adjudication. Second, we could pursue cooperation with organizations representing the "Soviet Union and other socialist nations" by cultivating understanding and attitudes. Third, we could assist those organizations (and their members) that represent the "developing nations" by rendering benefits.

As mentioned earlier, the organizations addressed in this survey are presented in order of their potential effectiveness in abating transnational pollution. Following this ordering, the penultimate section is devoted to the UN Law of the Sea Conference, an attempt to legislate protection of the oceans. The final section contains a general bibliography.

II

ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT (OECD)

Background and Structure

In 1948, the United States offered the Marshall Plan to the European nations. Under this plan, aid was administered through the Organization for European Economic Cooperation (OEEC). A new organization emerged when the United States and Canada joined by signing the Convention of the Organization for Economic Cooperation and Development (OECD) on 14 December 1960. The purposes of this organization were to promote:

- Economic growth of its member nations.
- Help to the less-developed nations both within and outside its own membership.
- Expansion of world trade on a multilateral, nondiscriminatory basis.

Members of the original organization, OEEC, were the United Kingdom, Ireland, Iceland, Norway, Sweden, Denmark, the Federal Republic of Germany, Turkey, Greece, Italy, Austria, Switzerland, the Netherlands, Belgium, Luxembourg, France, Spain, and Portugal. When the United States and Canada joined these nations in forming OECD, the total number of members was 20. Japan joined in 1964; Finland, in 1969; Australia, in 1971; and New Zealand, in 1973; Yugoslavia participated to a degree. See Figure 3.

The OECD derives its authority from the Council on which all member nations are represented. Decisions and recommendations are prepared by the Executive Committee composed of 13 of the member nations. The Council's instructions are executed by the Secretariat, made up of representatives chosen from member nations. National delegations of economic ambassadors provide a forum for exchanging viewpoints; representatives of member nations prepare annual programs for approval by the Council. Figure 6 indicates the position of committees in the organization. Figure 7 illustrates the organization of just one of OECD's Committees, the Environment Committee.

Strategies Used

The primary strategy which the OECD uses is the rendering of benefits. Since 1962, OECD has published documents pertinent to pollution control. As of 1976, 99 such documents have been published, and 27 articles on this topic have been printed in OECD's monthly publication, The OECD

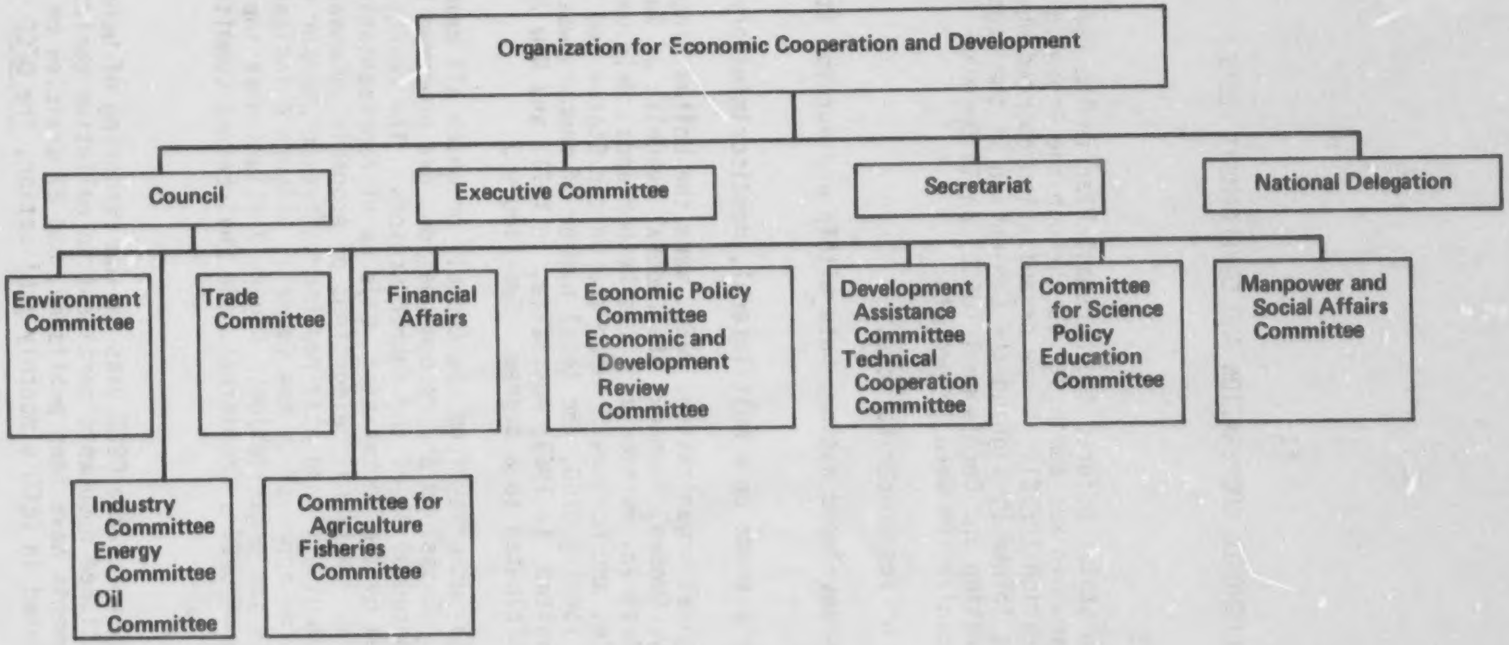
Organization for Economic Cooperation and Development
Council
Executive Committee
Secretariat
National Delegation
Environment Committee
Trade Committee
Financial Affairs
Economic Policy Committee
Economic and Development Review Committee
Development Assistance Committee
Technical Cooperation Committee
Committee for Science Policy
Education Committee
Manpower and Social Affairs Committee
Industry Committee
Energy Committee
Oil Committee
Committee for Agriculture
Fisheries Committee

Figure 6. Organization chart of the Organization for Economic Cooperation and Development.

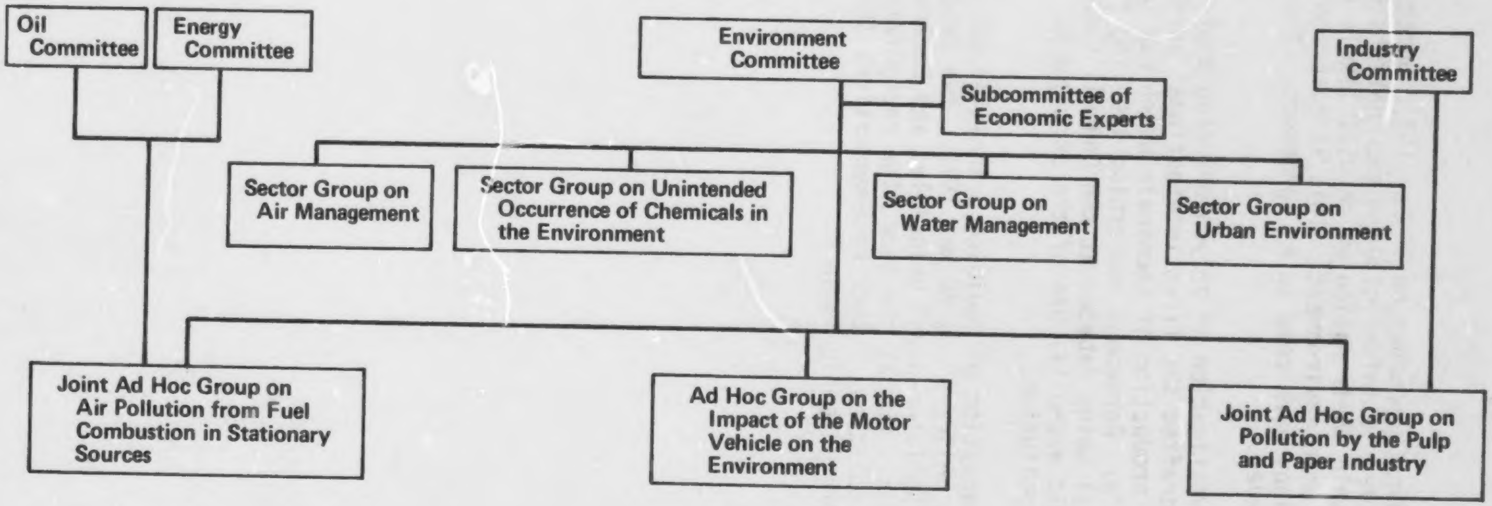
Oil Committee
Energy Committee
Environment Committee
Industry Committee
Subcommittee of Economic Experts
Sector Group on Air Management
Sector Group on Unintended Occurrence of Chemicals in the Environment
Sector Group on Water Management
Sector Group on Urban Environment
Joint Ad Hoc Group on Air Pollution from Fuel Combustion in Stationary Sources
Ad Hoc Group on the Impact of the Motor Vehicle on the Environment
Joint Ad Hoc Group on Pollution by the Pulp and Paper Industry

Figure 7. Organization chart of the Environment Committee of the Organization for Economic Cooperation and Development.

Observer.

OECD instituted an early warning procedure on 18 May 1971. Under this procedure, member nations have agreed to inform other member nations of actions that may be undertaken within their nation which will likely have adverse effects on people or the human environment. This is a form of legislative enactment whereby nations have come to an agreement. The effect is one of rendering benefits, however.

In 1972, OECD launched an investigation of polychlorinated biphenols (PCB's), and on 13 February 1973 drafted the first international agreement aimed at limiting and controlling production of chemicals which may harm the environment, in this case PCB's. Agreement concerning labeling of products containing PCB's was still being debated at the Council's meeting in July 1976. This agreement would exemplify use of the strategy of legislative enactment in abating pollution.

The Council adopted a recommendation of "guiding principles concerning economic aspects of environmental policies" on 26 May 1972. Two aspects are cost allocation through the "polluter-pays" principle; and harmony of environmental standards among nations but at the same time recognizing different national environmental policies. Other recommendations that have been adopted by the Council are presented in Table 3.

Table 3. Recommendations about pollution control adopted by the Council of the Organization for Economic Cooperation and Development

Date	Recommendation
18 September 1973	Measures to reduce all anthropogenic emissions of mercury to the environment
18 June 1974	Guidelines for action to reduce emissions of sulfur oxides and particulate matter from fuel combustion on stationary sources
14 November 1974	Assessment of the potential environmental effects of chemicals
	Analysis of the environmental consequences of significant public and private projects
	Noise prevention and abatement
	Traffic limitation and low-cost improvement of the urban environment
	Measures required for further air pollutants control
	Control of eutrophication of waters
	Strategies for specific water pollutants control
	Energy and the environment
	Implementation of the polluter-pays principle
	Principle concerning transfrontier pollution
11 May 1976	Equal right of access in relation to transfrontier pollution
28 September 1976	Comprehensive waste management policy
12 October 1976	Reduction of environmental impacts from energy production and use
	Principles concerning coastal management

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III

NORTH ATLANTIC TREATY ORGANIZATION (NATO)

Background and Structure

The North Atlantic Treaty was signed on 4 April 1949 and became effective on 24 August 1949. Signatories were Belgium, Canada, Denmark, France, Iceland, Italy, Luxembourg, the Netherlands, Norway, Portugal, the United Kingdom, and the United States. Greece and Turkey acceded to the Treaty on 18 February 1952, and the Federal Republic of Germany acceded on 9 May 1955. (France subsequently withdrew from the military part of NATO in 1966.) Figure 8 shows the membership of NATO as of 1 January 1978.

Under the Treaty, the North Atlantic Council, composed of representatives of member nations, was created. The Council could establish other bodies as needed, including specialized committees and groups, the International Secretariat and a military committee which serve the Council, military commands, and military and civilian agencies. The Council set up a Committee of Three on Non-Military Cooperation in May 1956. As a result of this Committee's recommendations, several specialized committees were formed, including the Science Committee. Great interest in this Committee encouraged the United States to promote the establishment of a Committee on the Challenges of Modern Society (CCMS) to deal with the quality of human life. The CCMS was established on 6 November 1969 and has devoted its effort to studying problems of the environment. Figure 9 shows the reporting line of CCMS within NATO.

Strategies Used

To achieve its goals, CCMS uses the "pilot country" approach, an orientation to action rather than research, and a policy of open publicity. Perhaps the pilot country approach is the most unique feature of CCMS, whereby one nation takes responsibility for a new environmental project. The pilot country is responsible for planning, paying for, and reporting on a project and, if able, acting; each pilot country manages its own projects. There is no need to involve NATO as a whole. Fortunately, because of their commitment, pilot countries take their projects seriously; they can also cooperate with other countries as copilots in a project if they wish. The strategy used in the pilot projects is to cultivate understanding and attitudes through symposiums, meetings, and demonstrations by the pilot and copilot countries.

CCMS pilot projects and countries include those shown in Table 4.

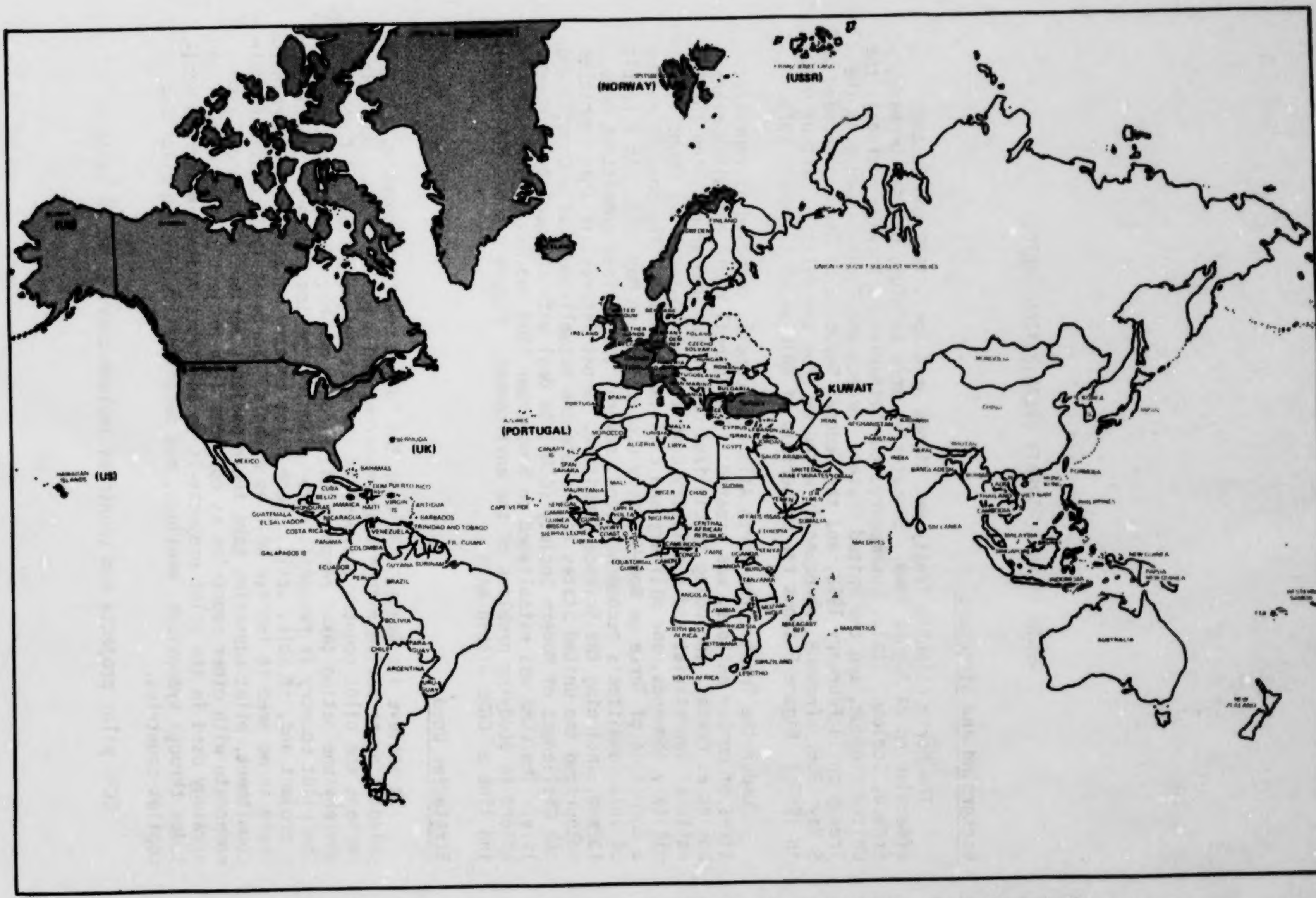

Figure 8. The shaded portion shows the 15 member nations of the North Atlantic Treaty Organization as of January 1978.

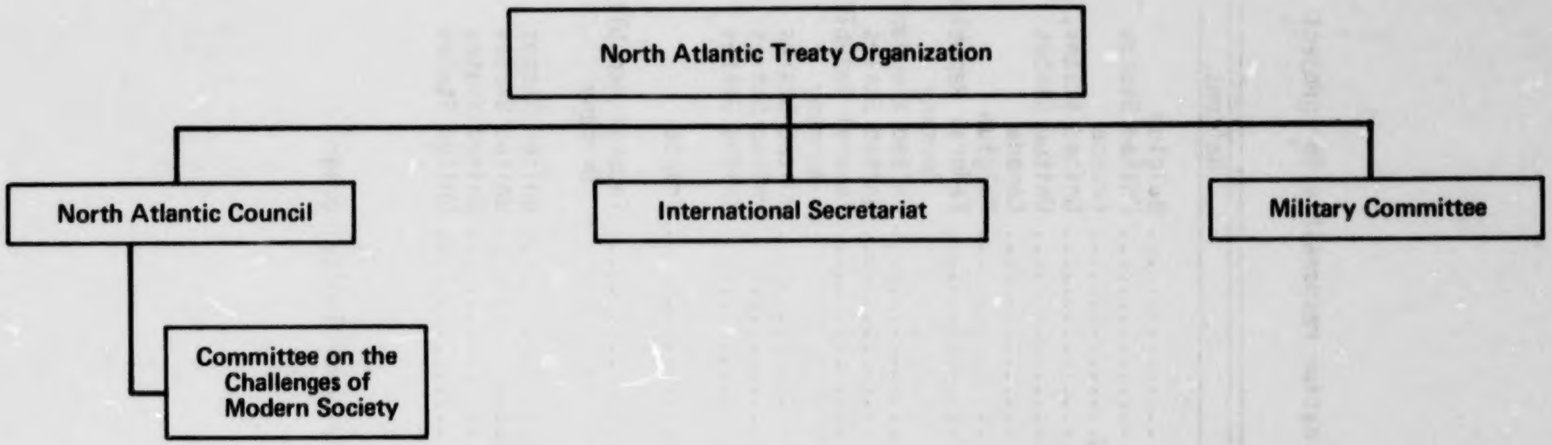
North Atlantic Treaty Organization
North Atlantic Council
International Secretariat
Military Committee
Committee on the Challenges of Modern Society

Figure 9. Organization chart that indicates the position of the Committee on the Challenges of Modern Society within the North Atlantic Treaty Organization.

Table 4. Twenty CCMS pilot projects by nation responsible for project

	Projects	Nations
1.	Ocean oil spills	Belgium
2.	Disaster assistance	United States
3.	Environmental and regional planning	France
4.	Road safety (seven projects)	United States, et al
5.	Air pollution	United States
6.	Inland water pollution	Canada
7.	Coastal water pollution	Belgium
8.	Advanced health care	Federal Republic of Germany
9.	Advanced wastewater treatment	United Kingdom
10.	Urban transportation	United States
11.	Disposal of hazardous wastes	Federal Republic of Germany
12.	Solar energy	United States
13.	Geothermal energy	United States
14.	Rational use of energy	United States
15.	Remote sensing in the control of marine pollution	France
16.	Air pollution assessment methodology and modeling	Federal Republic of Germany
17.	Automotive propulsion/low pollution power systems	United States
18.	Nutrition and health	United States
19.	Flue gas desulfurization	United States
20.	Drinking water	United States

NOTE: Projects are listed in essentially chronological order

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IV

EUROPEAN COMMUNITIES (COMMON MARKET)

Background and Structure

The European Communities resulted from a series of three treaties. The first established the European Coal and Steel Community (ECSC) on 18 April 1951, the second established the European Economic Community on 25 March 1957, and the third established the European Atomic Energy Community--also on 25 March 1957. The original membership included Belgium, the Federal Republic of Germany, France, Italy, Luxembourg, and the Netherlands. A fourth treaty concerning the accession of Denmark, Ireland, Norway, and the United Kingdom to the European Economic Community and the European Atomic Energy Community was signed on 22 January 1972. Norway, however, did not ratify the treaty; thus, there are currently 9 members of the Communities. See Figure 10.

The European Communities have four primary common institutions. These are the European Parliament (or Assembly), the Court of Justice, the Council of Ministers, and the European Commission. The Parliament provides democratic control; the Court of Justice provides judicial control; the Council of Ministers and the European Commission provide executive action. See Figure 11. There are also three institutionalized committees: the Economic and Social Committee, the ECSC Consultative Committee, and the Scientific and Technical Committee.

The European Parliament meets once a year and is composed of members elected by direct universal suffrage. Until a uniform procedure is agreed to, it will consist of delegates designated by the parliaments of the respective member nations. There are 198 delegates, and each nation is assigned a specified number of delegates. The Parliament discusses in open session a report submitted to it by the Commission. The Parliament has the power to dismiss the whole Commission.

The Court of Justice consists of nine judges, insuring that the law is observed through the interpretation and application of the treaty. The Council of Ministers represents the member nations and is responsible for making unanimous decisions whenever required by the treaty.

The European Commission is the executive branch of the Communities and consists of 13 nationals of the member nations. Special responsibilities are assigned to each member of the Commission. The Commission comprises a president, five vice-presidents, and seven other members. Environmental

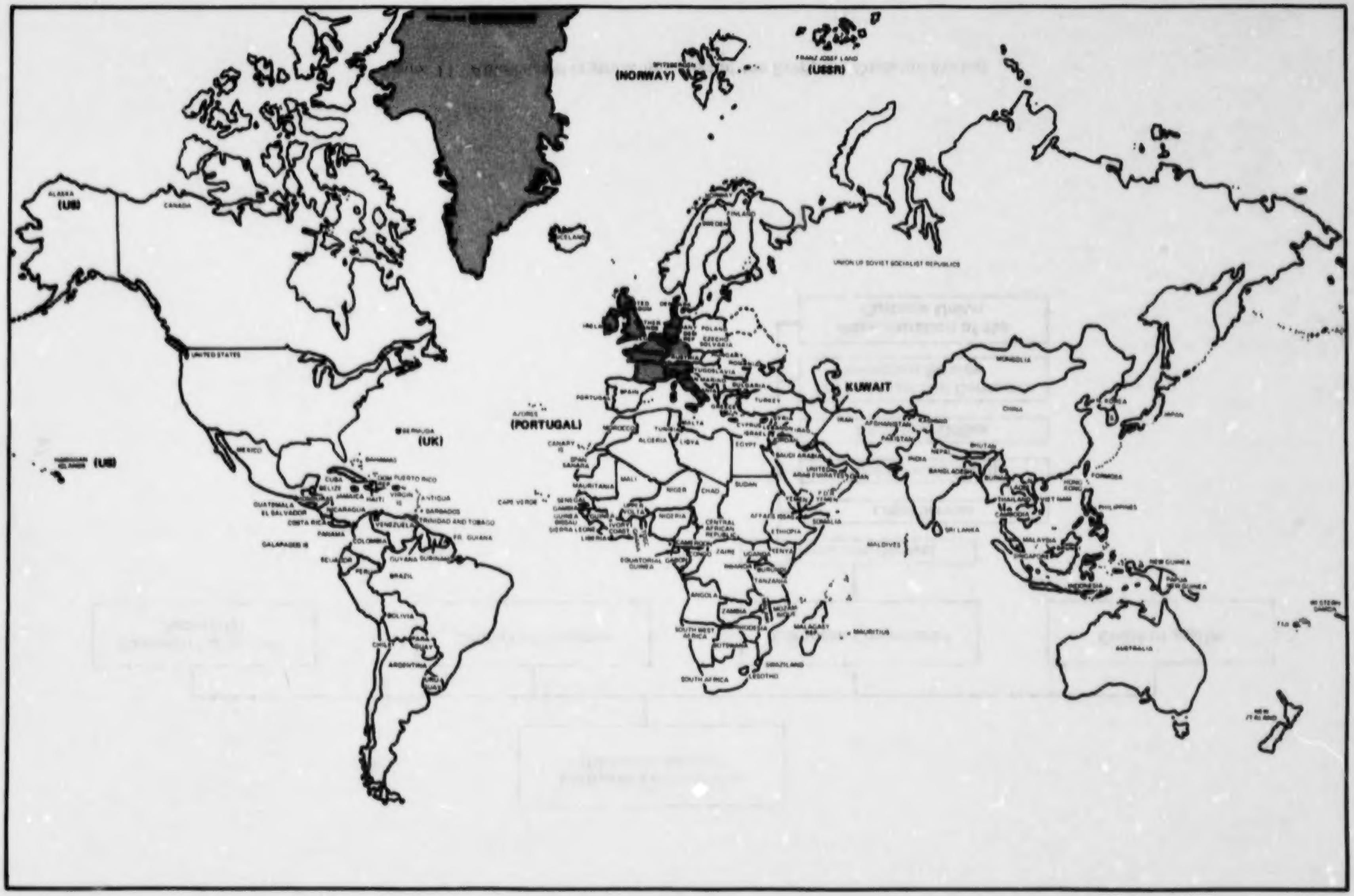

Figure 10. The shaded portion shows the 9 member nations of the European Communities (Common Market) as of 1 January 1978.

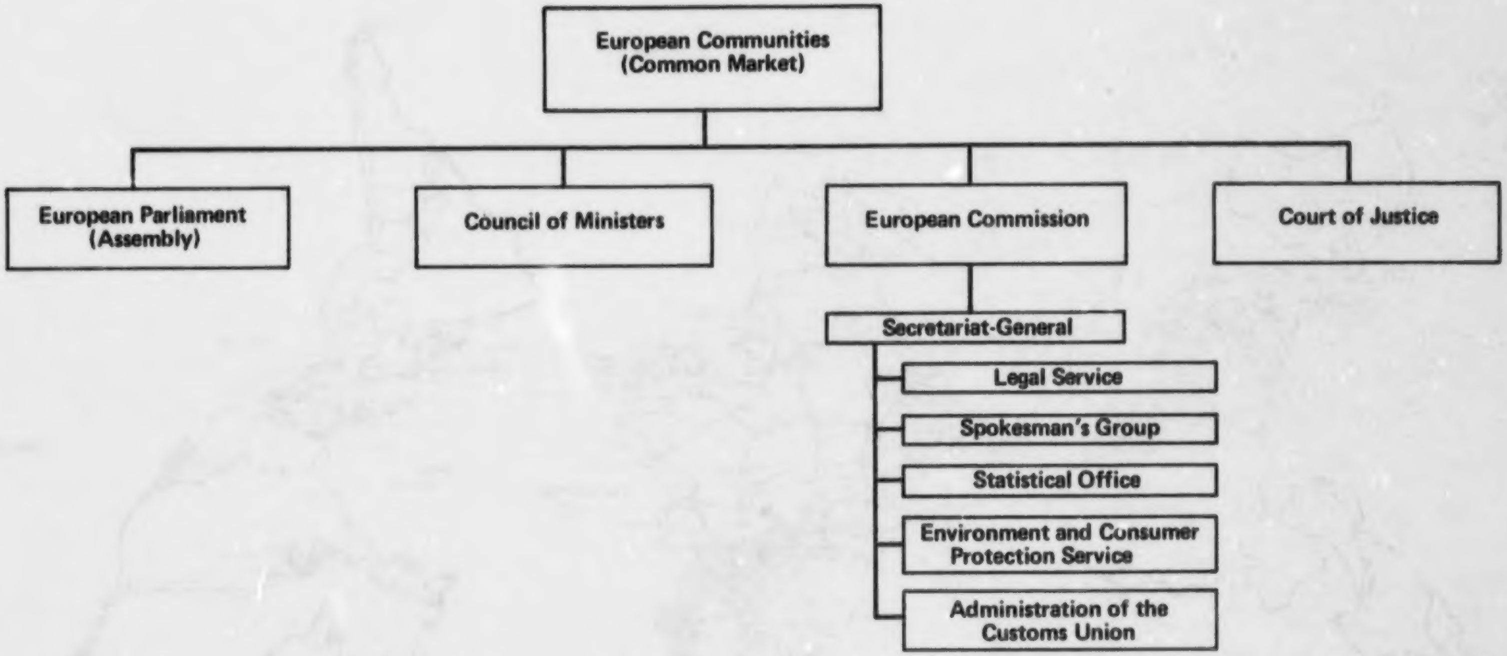
European Communities (Common Market)
European Parliament (Assembly)
Council of Ministers
European Commission
Court of Justice
Secretariat-General
Legal Service
Spokesman's Group
Statistical Office
Environment and Consumer Protection Service
Administration of the Customs Union

Figure 11. Abbreviated organization chart of the European Common Market.

policy, in addition to transport and the protection of the consumer interests, is a responsibility assigned to one of the vice-presidents.

The operational organization of the Commission is the Secretariat-General. The Secretariat-General is responsible for the organizational components--Legal Service, Spokesman's Group, Statistical Office, Administration of the Customs Union, and the Environment and Consumer Protection Service.

Strategies Used

The environmental policies used by the individual members of the European Communities are different and diverse. The Council of Ministers seeks to coordinate national measures to improve the quality of life.

The Council adopted an environmental program on 22 November 1973 based on the "polluter-pays" principle. This program stressed pollution prevention, natural resource management, control of economic growth, consideration of environmental impacts, and seeking solutions to common environmental problems. Outlined in the initial action plan were programs for clean air, clean water, control of ocean pollution, and control of waste. (One specific interest is to clean up the Rhine River.) Communities' action at international conventions on the environment was a part of the adopted program.

On 24 March 1976, the Commission presented a draft resolution to the Council entitled, "Continuation and Implementation of a European Community Policy and Action Programme on the Environment." This draft resolution presents an action program for the European Communities from 1977 through 1981. The Commission will propose directives or resolutions to the Council. Once a directive is adopted by the Council, the Commission will monitor the member nations to assure compliance. The Court will resolve disputes regarding interpretations of the treaties and of Council resolutions.

The Council has also established procedures for inventorying environmental information jointly with the United Nations Environment Program. The Commission has launched an education program that deals with the environment. Thus the European Communities use the strategies: legislative enactment, adjudication, rendering of benefits, and cultivation of understanding and attitudes.

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V

COUNCIL OF EUROPE

Background and Structure

The Council of Europe was created on 5 May 1949 by a treaty signed in London on behalf of the Governments of Denmark, France, Ireland, Italy, Luxembourg, the Netherlands, Norway, Sweden, and the United Kingdom. The treaty became effective on 3 August 1949.

Subsequent signatories were Greece, Turkey, Iceland, the Federal Republic of Germany, Austria, Cyprus, Switzerland, Belgium, and Malta. See Figure 12 for a map showing all current members. The Council of Europe facilitates economic and social progress taking into account common heritage. Defense does not fall within the scope of the Council of Europe.

The three purposes of the Council are a united Europe, an outward-looking Europe, and a peaceful, just, and prosperous world. This is the first international organization to work for a united Europe, and its 18 member nations have a total population of 300 million people.

The Council of Europe consists of a Committee of Ministers and a Consultative Assembly, both served by a Secretariat. The Committee of Ministers, composed of one representative from each member nation, provides a a forum for the conclusion of conventions or agreements or the setting of common policy either self-initiated or at the recommendation of the Consultative Assembly. The Consultative Assembly engages in debate and makes recommendations to the Committee of Ministers. It has 147 representatives from member nations selected from among and by the parliaments of each nation. The Secretariat is the permanent staff, numbering about 600, of the Council of Europe and is directed by a Secretary-General. Figure 13 displays the organization of the Council of Europe.

Strategies Used

The Consultative Assembly passed a recommendation that promoted conservation of flora and fauna. On 5 December 1962, the Committee of Ministers passed a resolution authorizing the Secretary-General to convene a committee of experts, later to become the European Committee for the Conservation of Nature and Natural Resources. The Committee provides information and education and promotes conservation.

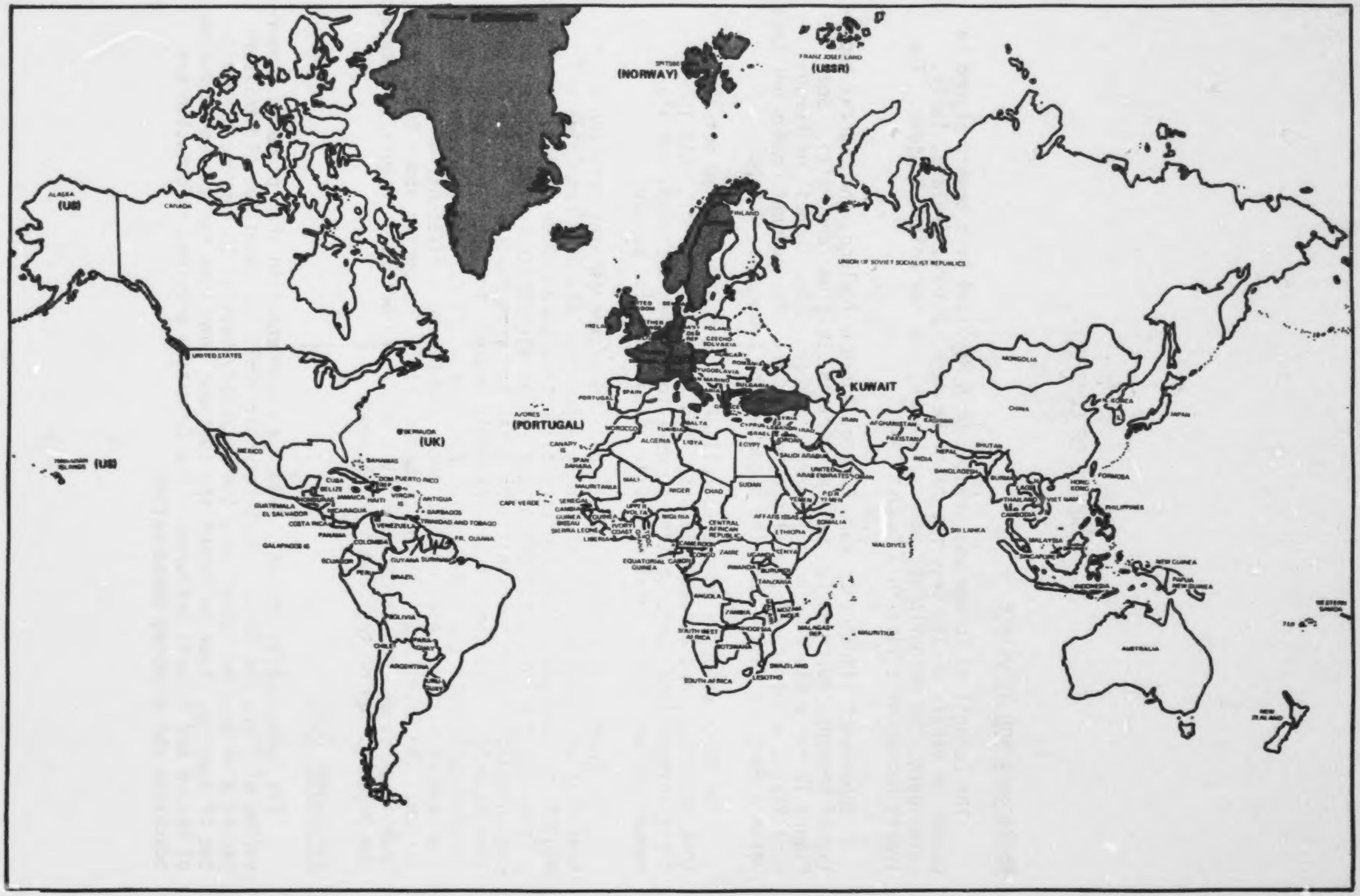

Figure 12. The shaded portion shows the 18 member nations of the Council of Europe as of January 1977.

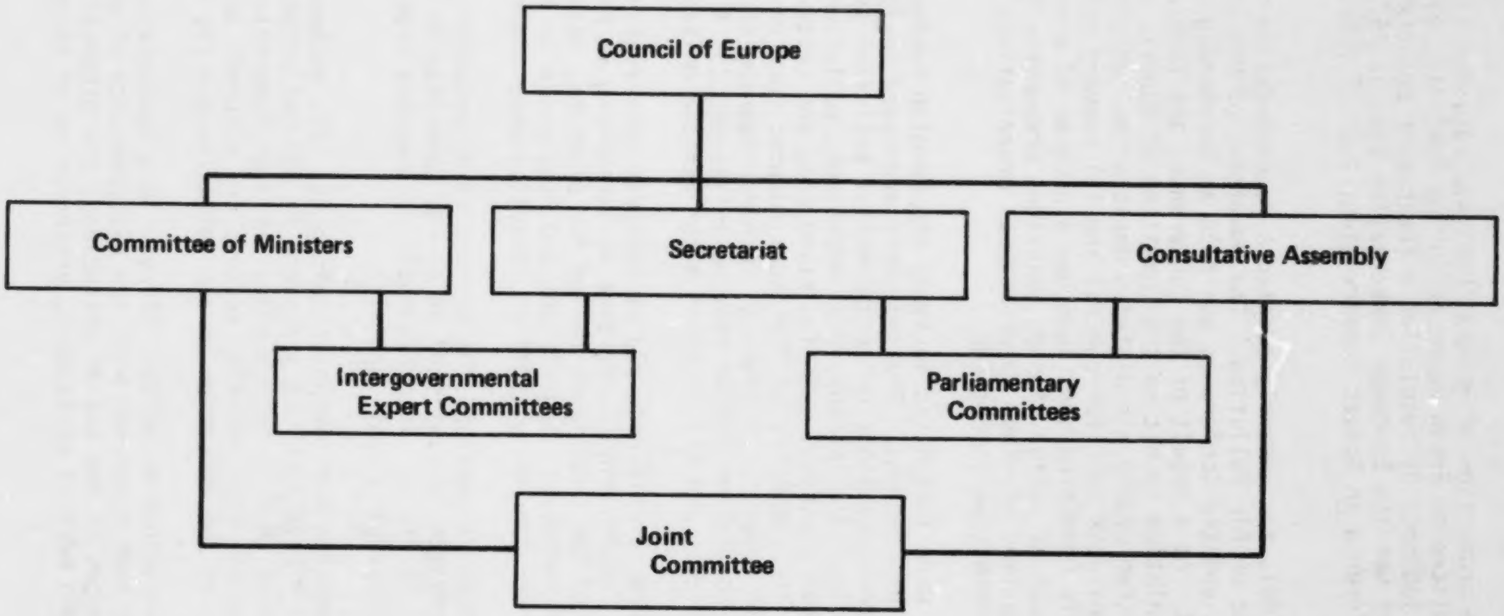

Figure 13. Organization chart of the Council of Europe.

The stress on the protection of natural habitats resulted in establishing an ad hoc Sub-Committee on Fresh Water Pollution Control. On 6 May 1968, the Council of Europe launched by resolution a freshwater conservation campaign. A major project was the European Conservation Year in 1970 resulting from the European Conference on Nature Conservation, 9 to 13 February 1970, in Strasbourg, France.

On 23 September 1961, the Assembly adopted a recommendation to convene the European Conference on Air Pollution. The Committee of Ministers acted on the proposal, and the Conference was held at Strasbourg from 24 June to 1 July 1964. As a result of the Conference, the Committee of Ministers passed a resolution to set up the Committee of Experts on Air Pollution. This Committee widely circulated a declaration containing two principles: (1) the polluter pays for control and (2) prevent pollution before it happens. This Committee also launched a program of work focusing on specific problems such as sulfur dioxide emissions presumably from coal combustion. Representatives of other international organizations were invited to attend the Committee's meetings.

Two subcommittees were instructed to study and develop recommendations on specific air pollution problems. Problems were addressed in 1969 and 1970 and resulted in recommendations on transfrontier pollution problems and studies of sulfur dioxide emissions, fuel additives, pollution and its relationship to urban planning, emission standards, and criteria used for air quality. The Committee of Ministers adopted four resolutions in 1970 and 1971. These cover: (1) town and country planning and air pollution control, (2) control of sulfur dioxide emissions, (3) transfrontier pollution problems, and (4) limiting motor vehicle emissions.

The Council of Europe proclaimed 1970 as European Conservation Year--opened by the European Conservation Conference in Strasbourg in February 1970. The declaration of the Conference called for planning, international standards, and European harmony in legislation and regulation in the conservation of nature. More than 30 guidelines to action were proposed.

In 1969 the Committee recommended the control of groundwater pollution. In December 1970 the Committee established an ad hoc Committee of Experts to prepare a convention to protect international fresh waters from pollution. Its proceedings have been confidential.

As of 1972 the Committee was giving attention to: (1) exchange of information on national regulations and practices in air pollution control, (2) comparative studies of ways to reduce emissions from industrial establishments, (3) reduction of motor vehicle, vessel, and aircraft pollution, and (4) public information and education in air pollution and its control.

The Council has maintained an active interest in groundwater contamination. They have also been concerned with the disappearance of wildlife, the ecological consequences of the use of pesticides, the disposal of solid wastes, public health and medical assistance, preservation of historic and artistic sites, and the consideration of the conservation of nature in regional planning and development. Soil conservation is an area of devoted concern. A study, "Aspects of Soil Conservation in the Different Climatic and Pedologic Regions of Europe," was published in 1972.

A 5-year environmental program of work commenced in January 1972. This program was being considered by the Committee of Ministers for the Council of Europe.

The Council of Europe follows a typical sequence of strategies. First, by treaty, an international organization is established. This organization then, by resolution, establishes conferences that cultivate understanding and attitudes. As a result the organization establishes a policy or organizational element by legislative enactment. And finally, a system to render benefits ensues; the Council of Europe has done this through a "Nature and Environment" publication series and a few "How To..." technical booklets on pollution measurement.

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VI

COUNCIL FOR MUTUAL ECONOMIC ASSISTANCE (CMEA OR COMECON)

Background and Structure

The Council for Mutual Economic Assistance (CMEA) was established at an economic conference in Moscow on 25 January 1944. The CMEA held no meetings between 1944 and 1954; it reconvened in 1954 and in 1956 began comprehensive planning for economic coordination. Albania, Bulgaria, Cuba, Czechoslovakia, the Democratic Republic of Germany, Hungary, Mongolia, Poland, Romania, and the Union of Soviet Socialist Republics are members. Yugoslavia is an associate member, and an agreement of association with Finland was signed in March 1973. Albania has not participated since 1961. See Figure 4. Nations having observer status are Vietnam, Laos, Angola, and Ethiopia. In 1978 Vietnam requested full membership in CMEA.

The purpose of CMEA is to stimulate planned economic development of its members, economic and technical progress, industrialization, labor productivity, and the welfare of the people. The CMEA Secretariat maintains close relations with the UN Economic Commission for Europe (ECE). In fact the representatives of member nations of CMEA participate in both groups. CMEA also participates in meetings with the Nordic Council.

CMEA consists of four bodies: the Session of the Council, the Executive Committee of the Council, Standing Commissions, and the Secretariat. The Session meets biannually and is composed of delegates from each member nation. One representative from each nation sits on the Executive Committee that meets every 2 months. Commissions are established by the Session of the Council. There are currently 16 commissions. The Secretariat is composed of a Secretary of the Council, his deputies, and staff who are responsible for Secretariat functions. The Secretariat has its headquarters in Moscow. Although the Council of Plenipotentiaries (see Figure 14) is of obvious importance, its place in the CMEA structure is unknown, based on Bibliography VI.

Strategies Used

CMEA nations and Yugoslavia cooperate in an overall program organized by the Council for Environmental Protection and Improvement. Under this program, they have cooperated in the completion of close to 300 studies centered around research in 1976. A report, "Environmental Protection," detailing the principles of environmental education, was prepared for use in designing curricula for primary, secondary, and higher schools. Another

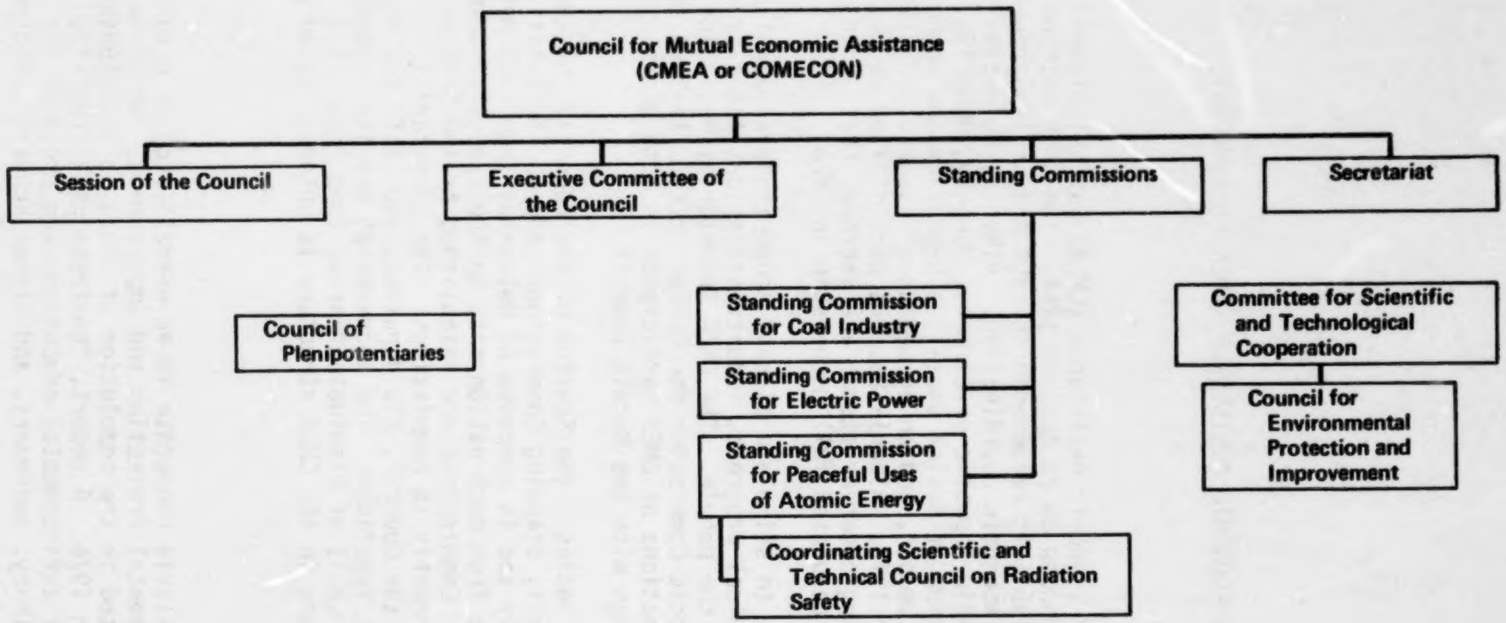
Council for Mutual Economic Assistance (CMEA or COMECON)
Session of the Council
Executive Committee of the Council
Standing Commissions
Secretariat
Council of Plenipotentiaries
Standing Commission for Coal Industry
Standing Commission for Electric Power
Standing Commission for Peaceful Uses of Atomic Energy
Coordinating Scientific and Technical Council on Radiation Safety
Committee for Scientific and Technological Cooperation
Council for Environmental Protection and Improvement

Figure 14. Organization chart of the Council for Mutual Economic Assistance.

report was prepared by the Council of Plenipotentiaries--"Socioeconomic, Organizational, Legal, and Pedagogical Aspects of Environmental Protection." This Council documented analytical measurement methods for organic and nonorganic air pollutants and for bacteria in drinking and surface water in a report entitled, "Hygienic Aspects of Environmental Protection." The methods discussed are used by researchers, sanitarians, and industrial enterprises within the CMEA nations. Establishing noise standards is being considered. This same Council performed an analysis, "Conservation of Ecosystems and Landscapes," of the structures and functions of biogeocenosis to be used in the development of fundamental theories of rational use and management of natural resources. Some of these concepts are being used in the reclamation of landscapes that have been disturbed by industrial activity.

A significant effort has been indicated in protecting the air from pollution. Specialists of CMEA cooperating organizations have focused efforts on developing low-waste and nonwaste technology and pollution control systems. Methods for measuring pollutants emitted from motor vehicles have been investigated. The Council of Plenipotentiaries has published the results of 16 studies in "Meteorological Aspects of Atmospheric Pollution."

Also published was "Protection of Waters from Pollution." Again, waste-free technology is a primary focus. Radiation safety is also pursued.

CMEA uses legislative enactment in establishing cooperative arrangements with UNEP, UNESCO, UN, and ECE; cooperation is evident between CMEA and Finland. As a result of the many CMEA publications that are made available to its members, rendering of benefits takes place. The cultivation of understanding and attitudes is also evident. As an example, there are regular joint meetings of the Conference of Heads of Water Economy Bodies of CMEA member nations and of the Council for Environmental Protection and Improvement. One meeting, held in 1976, was attended by representatives of other international organizations.

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VII

ORGANIZATION OF AMERICAN STATES (OAS)

Background and Structure

The International Union of American Republics was established in Washington, D.C., on 14 April 1890. In 1910 it was renamed the Pan American Union. The Ninth International Conference of American States, meeting in Bogota, Colombia, adopted a charter in 1948 wherein the Pan American Union became the General Secretariat of the Organization of American States (OAS). On 27 February 1970, the Pan American Secretariat became the General Secretariat as a result of amendments to the charter.

The Organization's purposes are:

- To strengthen the peace and security of the American continents.
- To prevent possible causes of difficulties and to ensure the peaceful settlement of disputes that may arise among member nations.
- To provide for common action on the part of the member nations in the event of aggression.
- To seek the solution of political, juridical, and economic problems that may arise among member nations.
- To promote economic, social, and cultural development of member nations through cooperation.

Membership in the OAS comprises 24 Western Hemisphere nations: Argentina, Barbados, Bolivia, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago, the United States, Uruguay, and Venezuela. Cuba, although a member, has been excluded from participation since 1962. See Figure 15.

The General Assembly of OAS has three councils reporting to it: (1) the Permanent Council, (2) the Inter-American Economic and Social Council, and (3) the Inter-American Council for Education, Science, and Culture. The General Secretariat, headquartered in Washington, D.C., is responsible to the General Assembly and the councils. In addition it fulfills functions assigned to it by the charter. Several specialized organizations report to both the General Assembly and the General Secretariat.

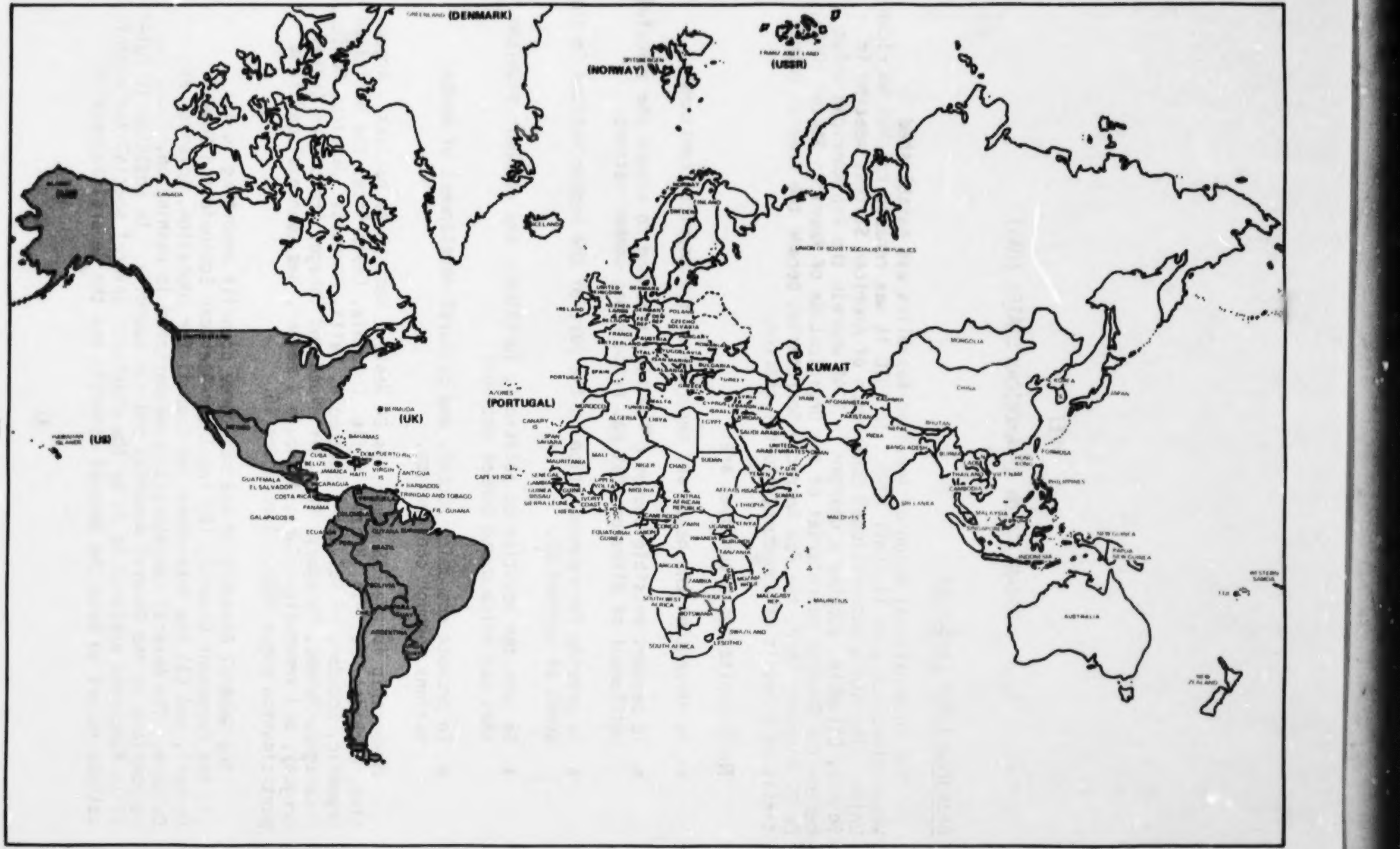

Figure 15. The shaded portion shows the 24 member nations of the Organization of American States as of January 1977.

One of these is the Pan American Health Organization (PAHO), also a regional arm of the World Health Organization. Others can be seen in Figure 16.

OAS has four official languages: English, Spanish, Portuguese, and French. In addition to the Washington, D.C. office, OAS maintains 22 offices in the capitals of member nations, an office in Europe, and an office at the Latin American Free Trade Association in Montevideo, Uruguay. The General Assembly meets once a year.

Strategies Used

Environmental assessments have been provided as a discretionary benefit by OAS. With financial support from UNEP and the UN Development Program, OAS contracted an environmental study of the development of the Bermejo River in Argentina. This study started in September 1975. Such assessments have also been made of the Pilcomayo River Basin of Argentina, Paraguay, and Bolivia in February 1975 and of the Upper Paraguay Basin of Brazil in April 1976.

PAHO has increased its efforts to render benefits. A program for exchanging information on environmental health matters is given priority.

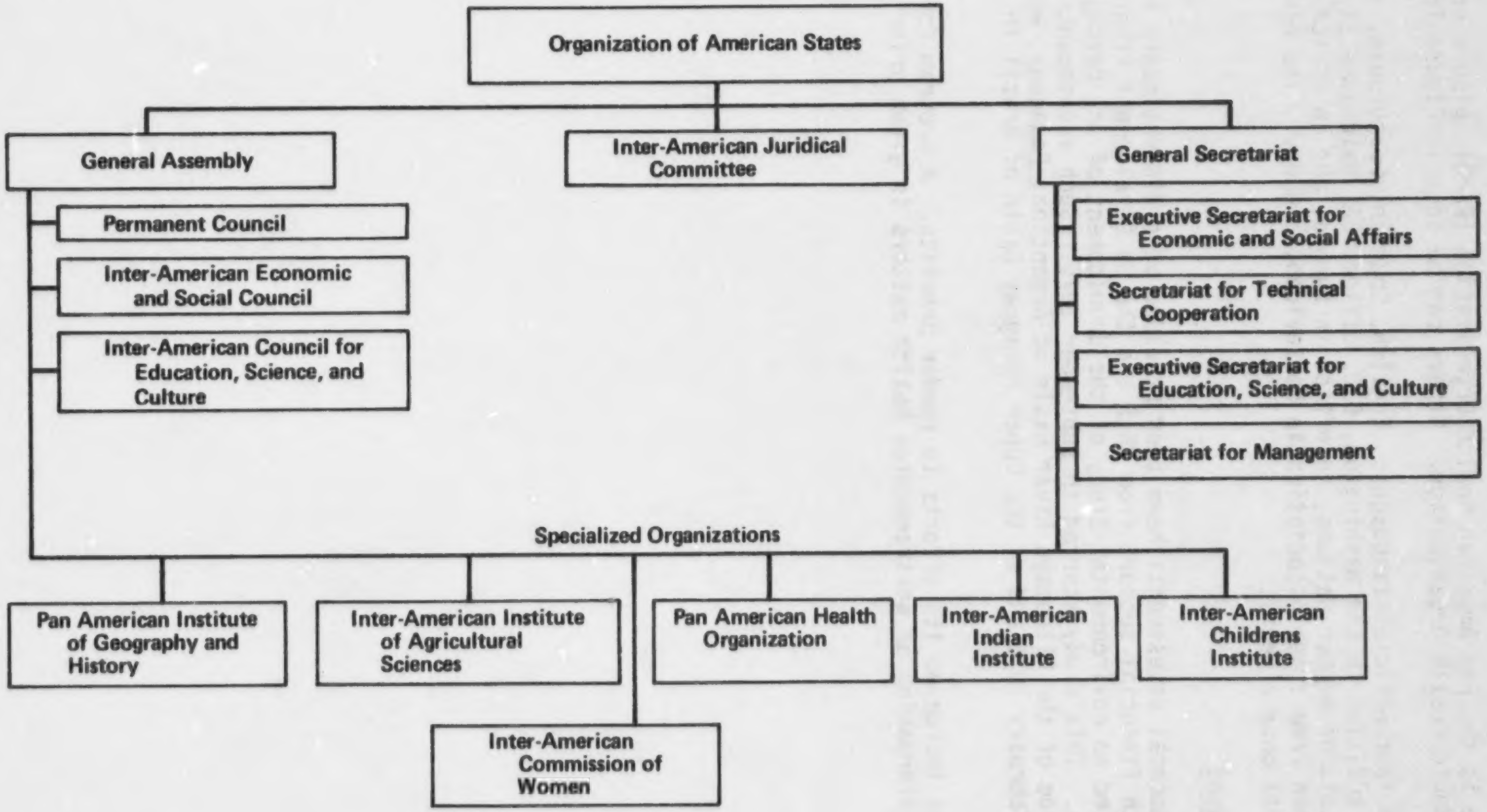
Organization of American States
General Assembly
Permanent Council
Inter-American Economic and Social Council
Inter-American Council for Education, Science, and Culture
Inter-American Juridical Committee
General Secretariat
Executive Secretariat for Economic and Social Affairs
Secretariat for Technical Cooperation
Executive Secretariat for Education, Science, and Culture
Secretariat for Management
Specialized Organizations
Pan American Institute of Geography and History
Inter-American Institute of Agricultural Sciences
Pan American Health Organization
Inter-American Indian Institute
Inter-American Childrens Institute
Inter-American Commission of Women

Figure 16. Organization chart of the Organization of American States.

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VIII

UNITED NATIONS REGIONAL COMMISSIONS

Background and Structure

The five regional economic commissions are subsidiaries of the United Nations Economic and Social Council (ECOSOC). Their dates of establishment are:

(1) Economic Commission for Europe (ECE)	1947
(2) Economic and Social Commission for Asia and the Pacific (ESCAP)	1947
(3) Economic Commission for Latin America (ECLA)	1948
(4) Economic Commission for Africa (ECA)	1958
(5) Economic Commission for Western Asia (ECWA)	1973

The United States is a member of ECE, ESCAP, and ECLA. ECWA began operations on 1 January 1974. Its members consist of UN members of western Asia that use the ECOSOC services at the Beirut, Lebanon office. ECOSOC barred South Africa from ECA participation on 30 July 1963. See Figures 17-20.

The purposes of the regional commissions are to: (1) act concertedly on economic problems in the respective regions, (2) enhance economic relations among members and between its members and other nations, (3) study economic and technological problems of the region, and (4) collect, evaluate, and disseminate economic, technological, and statistical information. In addition, ESCAP, ECLA, ECA, and ECWA (5) promote economic development especially through coordinated policies, and (6) consider social aspects of economic development.

Each commission reports annually to and is under the general supervision of ECOSOC. Each commission may, with ECOSOC approval, establish subsidiary bodies. These bodies include committees on different economic sectors or problems. ECE has a Coal Committee but also has Senior Advisors to ECE Governments on Environmental Problems and has a Committee on Water Problems. ESCAP has a Committee on Industry and Natural Resources. ECLA has among its subsidiaries the Trade Commission, and ECA has among its subsidiaries the Conference of African Demographers. See Figure 21.

Strategies Used

ECE contains the primarily industrial nations of the world, so one sees

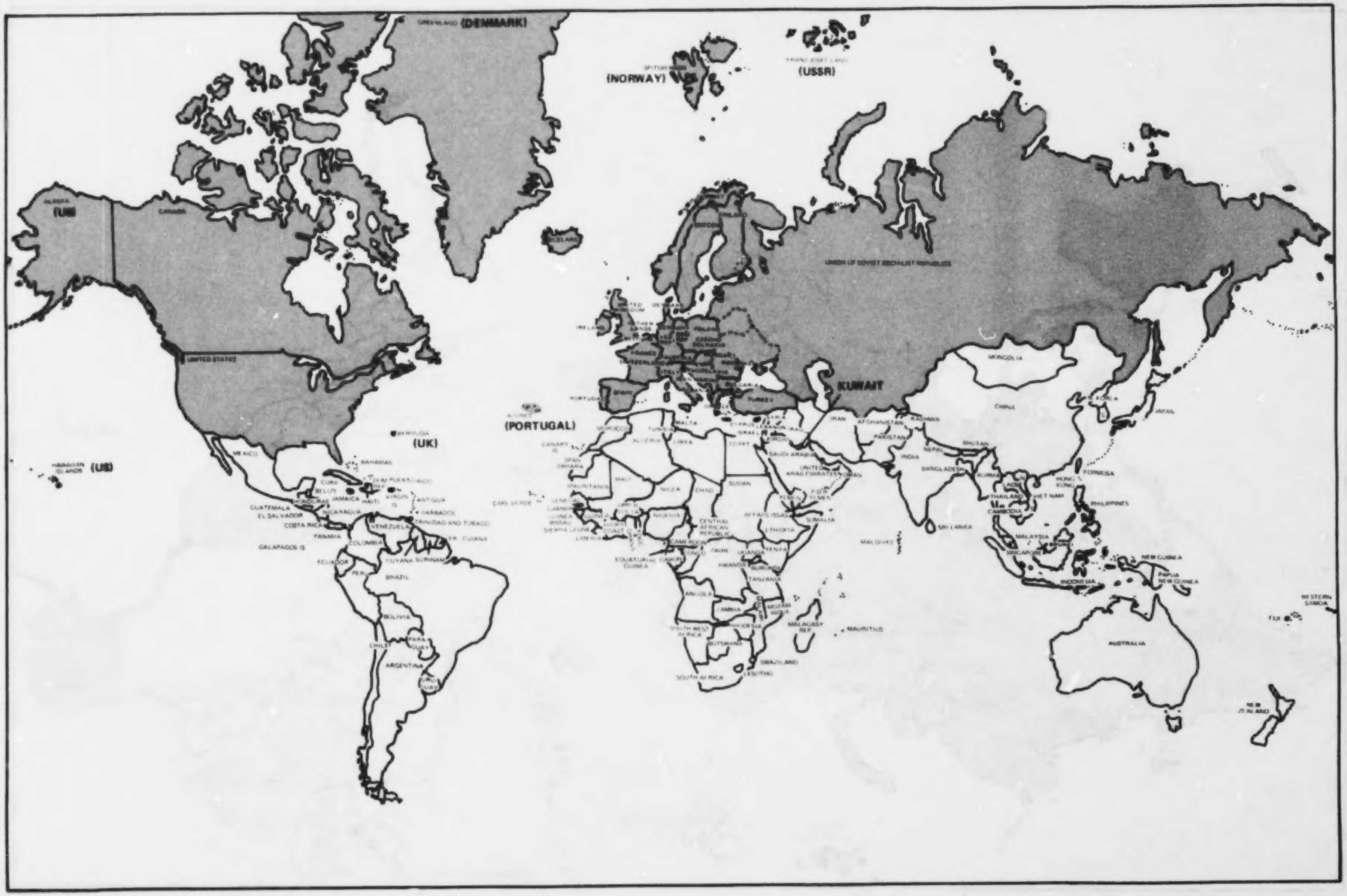

Figure 17. The shaded portion shows the 34 member nations of the Economic Commission for Europe as of January 1976.

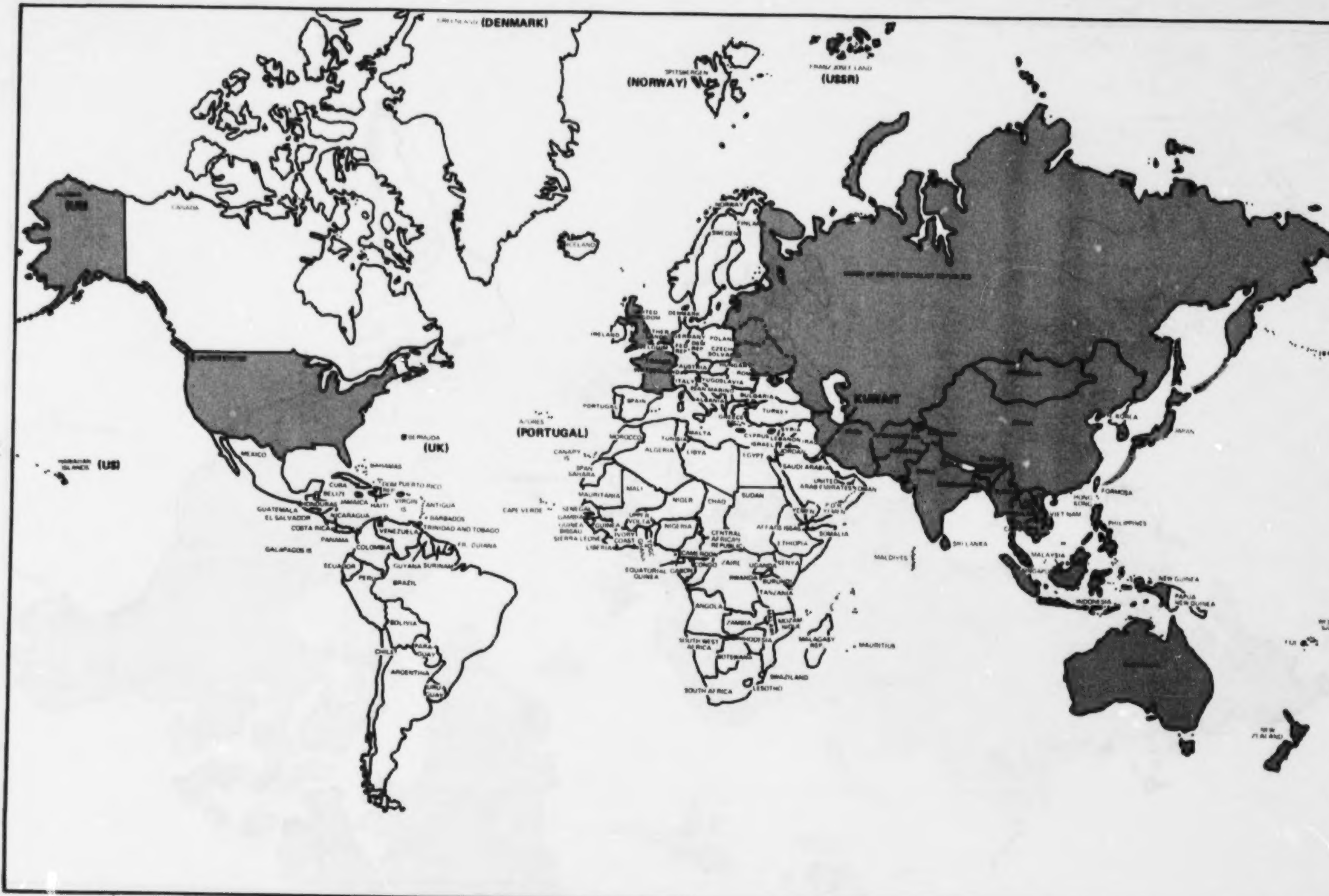

Figure 18. The shaded portion shows the 32 member nations of the Economic and Social Commission for Asia and the Pacific as of 1973.

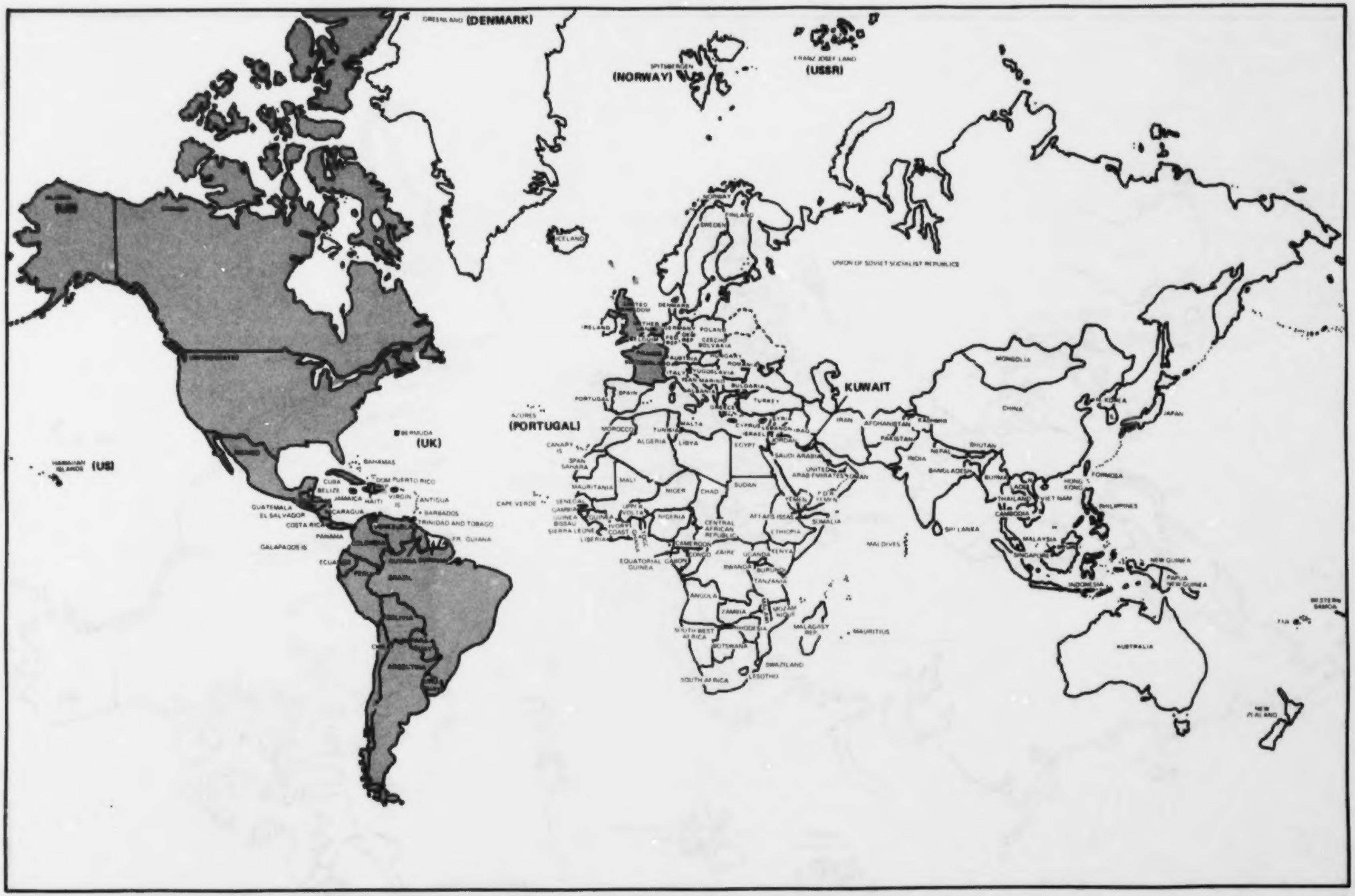

Figure 19. The shaded portion shows the 30 member nations of the Economic Commission for Latin America as of 1973.

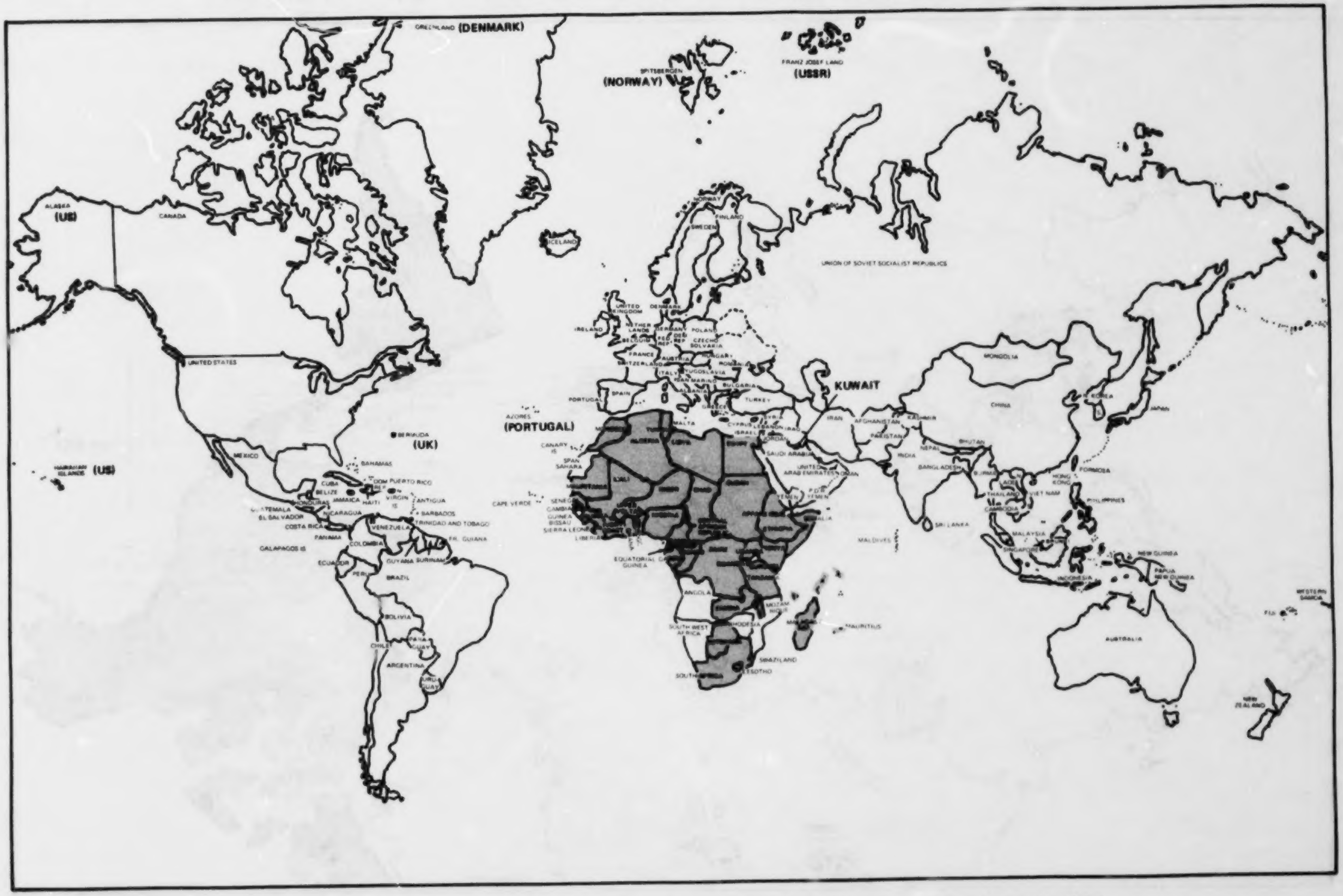

Figure 20. The shaded portion shows the 42 member nations of the Economic Commission for Africa as of 1973.

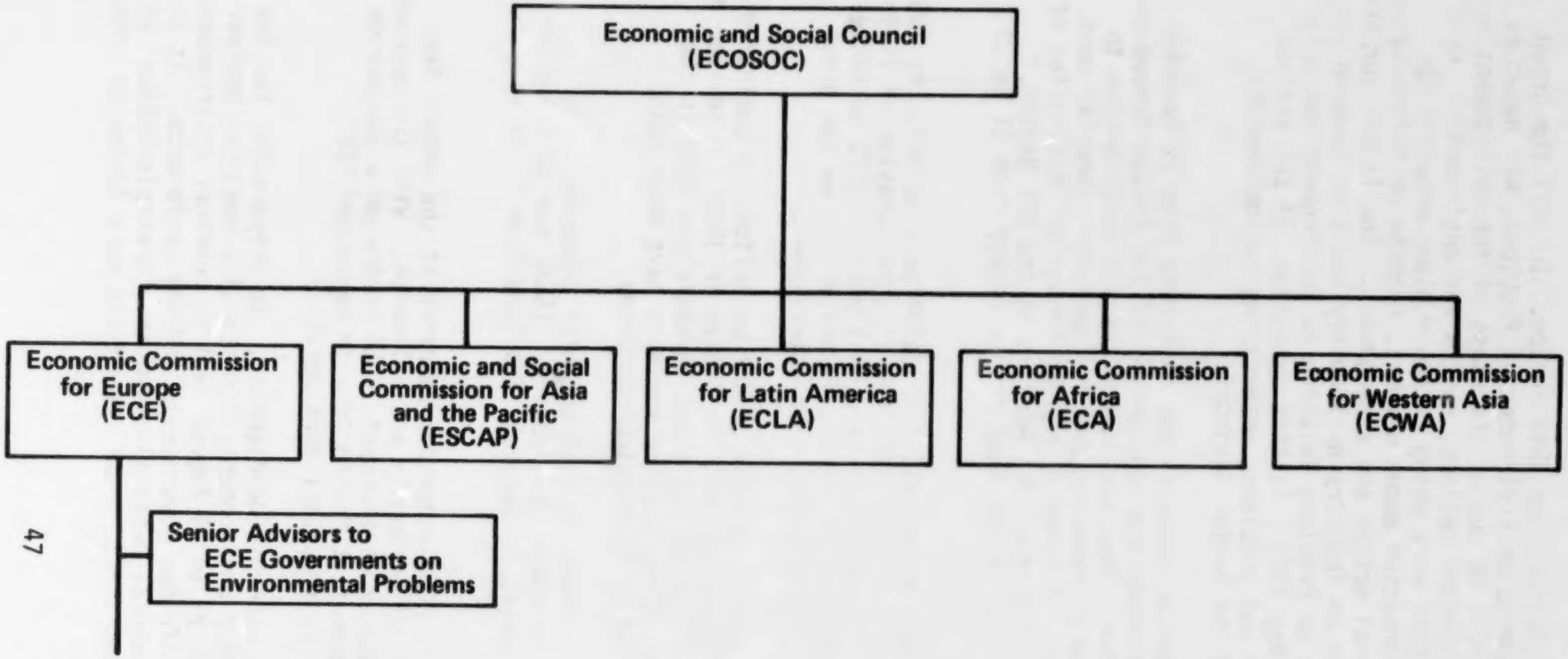
Economic and Social Council (ECOSOC)
Economic Commission for Europe (ECE)
Economic and Social Commission for Asia and the Pacific (ESCAP)
Economic Commission for Latin America (ECLA)
Economic Commission for Africa (ECA)
Economic Commission for Western Asia (ECWA)
Senior Advisors to ECE Governments on Environmental Problems

Figure 21. Organization chart showing the regional economic commissions in the United Nations Economic and Social Council.

the greatest concern about pollution from this region. In 1971 the group, Senior Advisors to ECE Governments on Environmental Problems, was named as a body of ECE. Its purposes were to survey the state of the environment and environmental institutions in member nations, review the environmental work other international organizations were doing in the region, organize the exchange of environmental information among members, examine decision-making tools, and promote international action and arrangement. The latter purpose was envisioned to be either on an industry-by-industry basis or between contiguous nations. A Symposium on Problems Relating to Environment was held in Prague, Czechoslovakia in May 1971. At this symposium, 27 ECE nations submitted monographs on their own problems, emphasizing socioeconomics. Conclusions were submitted to the Senior Advisors.

A first Session of the Senior Advisors met at Geneva from 29 November to 3 December 1971. They evaluated the conclusions of the Prague Symposium and considered follow-up action. They considered the ECE contribution to the UN Conference on the Human Environment and reviewed environmental work of other ECE subsidiary bodies. A compendium, "Environmental Activities of Other Principal International Organizations Working in the ECE Region," was prepared for a meeting of the Senior Advisors in Geneva from 21 to 22 February 1977.

Concern in Europe regarding water pollution dates back at least to 1956. In 1961, a Conference on Water Pollution resulted in a Declaration of Policy on Water Pollution Control. A seminar was held in Vienna in 1973 to address water pollution resulting from agriculture and forestry. An ad hoc group of experts on water quality and supply has been established.

ECE has also published several studies on air pollution. A seminar on desulfurization of fuels and gases was held in Geneva in 1970. A seminar on air and water pollution from the iron and steel industry was held in the Soviet Union in 1971. Several other similar seminars have been held. Interest has also been directed at statistical problems.

ESCAP has shown little interest in environmental concerns. Its primary interest has been in economic development. ESCAP met at a seminar on development and the environment in Bangkok, Thailand from 17 to 23 August 1971.

At the end of the 1950's, ECLA undertook research at the member level on water resources, including water supply and pollution. With the approach of the UN Conference on the Human Environment, ECLA conducted a seminar on problems of the human environment at Mexico City in September 1971. Regional planning emerged as an important consideration.

ECA has concentrated on economic development. In preparation for the 1972 UN Conference on the Human Environment, ECA met at a regional seminar at Addis Ababa, Ethiopia from 23 to 24 August 1971 to consider environmental problems and to prepare the African governments for the Conference. At the seminar, the cost of environmental protection and the "transplantation" of polluting industries were considered. Four committees were formed to cover environmental problems. These were the Committee on Human Settlements, the Committee on Natural Resources, the Committee on Development and Industrialization, and the Committee on Manpower and Environment.

The latter three commissions (ESCAP, ECLA, and ECA) maintain, as a primary concern, economic development. This concern was described by a panel of economic experts at Founex, Switzerland in June 1971. This panel was convened by the Secretary-General of the Stockholm conference. They reported (Bishop and Munro, p. 353):

> The major environmental problems of developing countries...are predominantly problems that reflect the poverty and very lack of development of their societies. They are problems, in other words, of both rural and urban poverty. In both the towns and in the countryside, not merely "the quality of life," but life itself is endangered by poor water, housing, sanitation and nutrition, by sickness and by natural disasters. These are problems, no less than those of industrial pollution, that clamour for attention in the context of the concern with human environment. They are problems which affect the greater mass of mankind.

The ECE, composed of industrialized nations of both Western and Eastern ideologies, is starkly different from the other commissions. The ECE nations are faced with pollution problems; the other commissions are faced with economic development problems. ECE uses both rendering of benefits and cultivation of understanding and attitudes while the other commissions use primarily the latter strategy.

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IX

INTERGOVERNMENTAL MARITIME CONSULTATIVE ORGANIZATION (IMCO)

Background and Structure

The UN Maritime Conference of 1948, held in Geneva, resulted in the drafting of the Intergovernmental Maritime Consultative Organization Convention. The Convention required ratification by at least 21 nations, 7 of which must individually exceed 1 million gross tons of shipping annually. This requirement was met on 17 March 1958. The first IMCO Assembly met in London in January 1959. There are 104 members of IMCO; in 1968 there were only 68. See Figure 22.

IMCO consists of five elements: the Assembly, the Council, the Maritime Safety Committee, the Secretariat of IMCO, and the Environmental Protection Committee. Normally, the Assembly meets in London every 2 years. It consists of representatives of each of the member nations. (Hong Kong has associate member status.) The Assembly considers a program of work, budget, and financial regulations. It elects the Council and approves the appointment of the Secretary-General of the Secretariat. See Figure 23.

The Council consists of 18 representatives of member nations. Each Council member has a term of 2 years. It meets semiannually and governs IMCO between Assembly sessions.

The Maritime Safety Committee consists of 16 representatives of member nations. Each representative is elected for a term of 4 years by the Assembly. The Committee is concerned with maritime safety and with preventing pollution of the sea by oil spills.

The Secretariat, located at IMCO headquarters in London, is directed by a Secretary-General. There are also a Deputy Secretary-General and several international civil servants. The Secretariat has four divisions. The Technical Division has three sections: the Ship Construction Section, the Navigation Section, and the Cargoes and Related Matters Section. The latter Section deals with oil pollution of the sea. There are also the Administrative Division, the Technical Cooperation Division, and the Legal Division. On 23 November 1973, the IMCO Assembly established the Environmental Protection Committee.

Strategies Used

An ad hoc diplomatic conference was held in London in April-May 1954 at

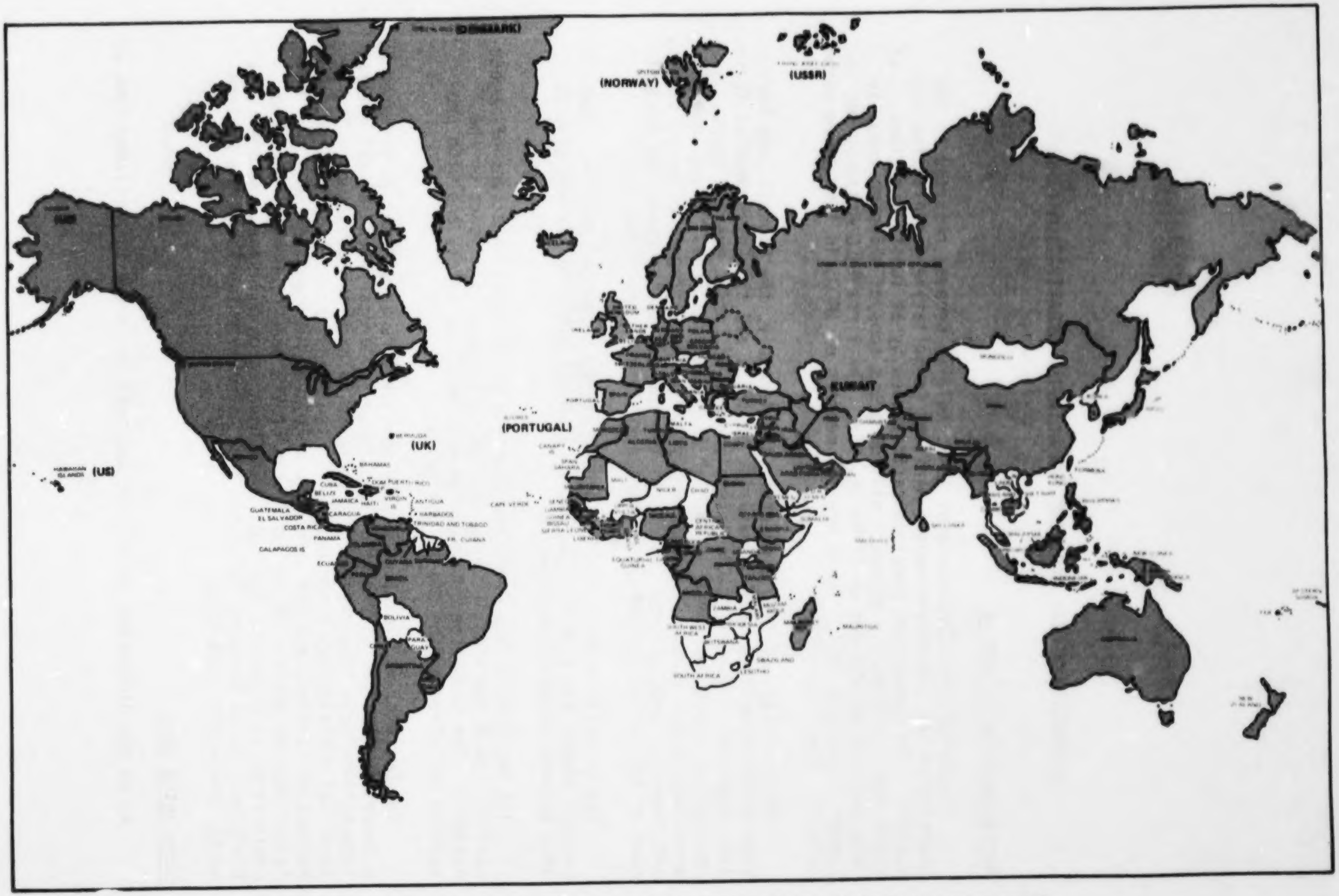

Figure 22. The shaded portion shows the 104 member nations of the Intergovernmental Maritime Consultative Organization as of January 1978.

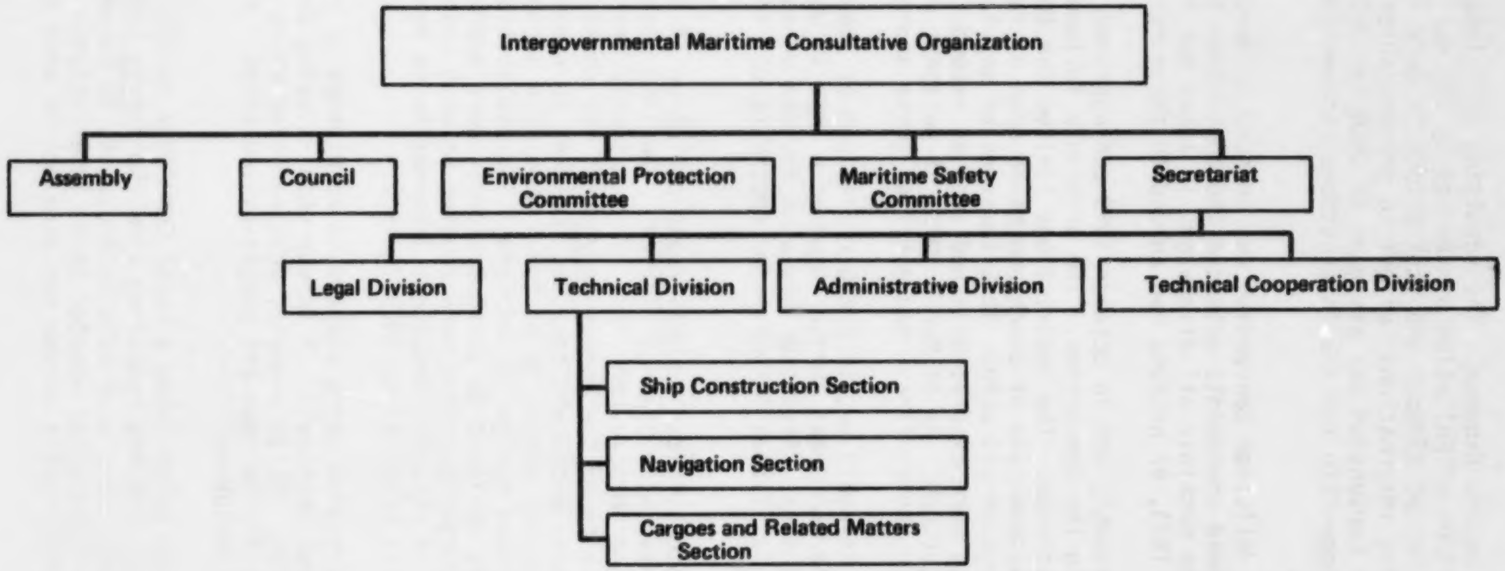
Intergovernmental Maritime Consultative Organization
Assembly
Council
Environmental Protection Committee
Maritime Safety Committee
Secretariat
Legal Division
Technical Division
Administrative Division
Technical Cooperation Division
Ship Construction Section
Navigation Section
Cargoes and Related Matters Section

Figure 23. Organization chart of the Intergovernmental Maritime Consultative Organization.

the invitation of the United Kingdom. The resulting 1954 International Convention for the Prevention of Pollution of the Sea by Oil was assigned to the Government of the United Kingdom and took effect in July 1958. The Convention was the first international effort to prevent ships from polluting the sea with oil. The Convention was assigned to IMCO in 1959, and in 1960 IMCO was also made responsible for the International Convention for the Safety of Life at Sea.

In 1962, the Oil Pollution Convention was amended by another International Conference. These amendments extended the Convention to apply also to smaller ships and to prohibit oil discharges in zones not formerly covered. As of March 1973, 47 nations had agreed to these restrictions.

The Sixth IMCO Assembly met in October 1969 and approved even more extensive amendments to the Convention. The principle followed was the total prohibition of oil discharge. The restrictions limited the total discharge of oil, limited the maximum rate of discharge based upon distance, and prohibited the discharge of oil within 80 kilometers of any land body. Procedural requirements were also established such as record-keeping and international communications. As of March 1973, 15 nations, representing 70 percent of the world tanker fleet, had ratified these amendments.

The Seventh IMCO Assembly met in October 1971 and at the encouragement of Australia recognized the Great Barrier Reef as a zone in which oil discharges would be prohibited. Attention was also focused on publishing information regarding facilities in ports for receiving oil residues from ships.

The preceding actions relate to deliberate pollution of the sea by oil. Accidental spillages have also been considered. The IMCO Assembly convened an Extraordinary Session in November 1968. This Assembly met as a result of the stranding and wrecking of the Torrey Canyon off the coast of Great Britain in 1967. It considered and approved measures to prevent the recurrence of like accidents and action to be taken when such accidents do occur. Mandatory use of specified navigation equipment and publications was adopted. Traffic control schemes designed to avoid accidents were approved. Limitations on tank size and configuration were adopted as were systems for reporting oil spills. A manual, "Practical Information on Means of Dealing with Oil Spillages," was prepared by IMCO in 1973.

Design criteria are also being adopted in an attempt to prevent spills of hazardous and noxious chemicals. A safety code is being developed for different types of ships. As an example, double-hulled ships are more likely to survive a collision than are single-hulled ships. Also, nuclear substances have been considered.

The Council of IMCO established a Legal Committee in 1967 to recommend action concerning legal problems resulting from the Torrey Canyon accident. As a result, legal conferences were held in Brussels, in November 1969 and December 1971. These conferences adopted three international conventions. One relates to the extent that a nation can take action when threatened by pollution from outside its territorial sea, another provides for the liability of a shipowner, and a third provides for compensation to be paid to victims.

In October and November 1973, the IMCO Assembly adopted the Convention on the Prevention of Pollution from Ships to control all pollution originating from vessels. This Convention set regulations for preventing pollution by oil, noxious liquids, harmful substances, sewage, and garbage; reporting breaches of the Convention; and resorting to arbitration. This Convention superseded the 1954 International Oil Pollution Convention, as amended.

At this 1973 IMCO Assembly, the United States presented a proposal to establish a permanent committee on marine pollution. IMCO established this committee with a regulatory function in connection with the Convention then under negotiation.

A 1973 IMCO Protocol on Intervention on the High Seas in Cases of Marine Pollution by Substances Other Than Oil also extended international principles for substances other than oil. These principles include good neighborliness, liability to compensate for unnecessary interference, and arbitration.

IMCO resulted from a treaty. Strategies used by IMCO were to cultivate understanding and attitudes through conferences and to legislatively enact environmental management and policy through conventions that require the concurrence of member nations. Publications constitute a form of guidelines that can be interpreted as cultivation of understanding.

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X.

WORLD BANK GROUP

Background and Structure

The World Bank Group has a membership of 132 nations and has subscriptions exceeding $20 billion. See Figure 24. It is composed of the International Bank for Reconstruction and Development (World Bank), the International Finance Corporation (IFC), and the International Development Association (IDA).

The World Bank Group represents an exception in control, for it does not rely on the "one nation, one vote" principle. Voting power is proportional to contributions to the World Bank's capital. The United States contributes 40 percent to the World Bank's capital, and thus holds 40 percent of its voting power. Although this does not constitute a majority, it is enough to enable the United States to maintain a decisive voice in naming presidents of the Bank. All presidents have been U.S. citizens.

The headquarters of the World Bank is located in Washington, D.C. All of the powers of the Bank are vested in a Board of Governors. Each member nation of the Bank is represented by one Governor and one alternate Governor; the alternate votes only in the absence of the Governor. The Bank is operated by 12 Executive Directors, 5 of whom are appointed by each of the 5 members who hold the largest number of shares; the remaining 7 Executive Directors are elected by the Board. The Executive Directors select a president to be their chairman and the chief of the operating staff of the Bank. See Figure 25 for an organization chart of the World Bank Group and Figure 26 for a chart of the World Bank and the position of the Office of Environmental and Health Affairs within the Bank.

In 1960, IDA was established as an affiliate of the World Bank, and its president acts as the president of IDA. IDA provides interest-free loans to developing nations for periods of up to 50 years. By 1962, it had committed most of its original $765 million.

IFC is also an affiliate of the World Bank. It provides loans to assist private capital investment in the developing nations. The World Bank president is also the IFC board chairperson.

Strategies Used

In 1970, Mr. Robert S. McNamara, President of the World Bank Group, in

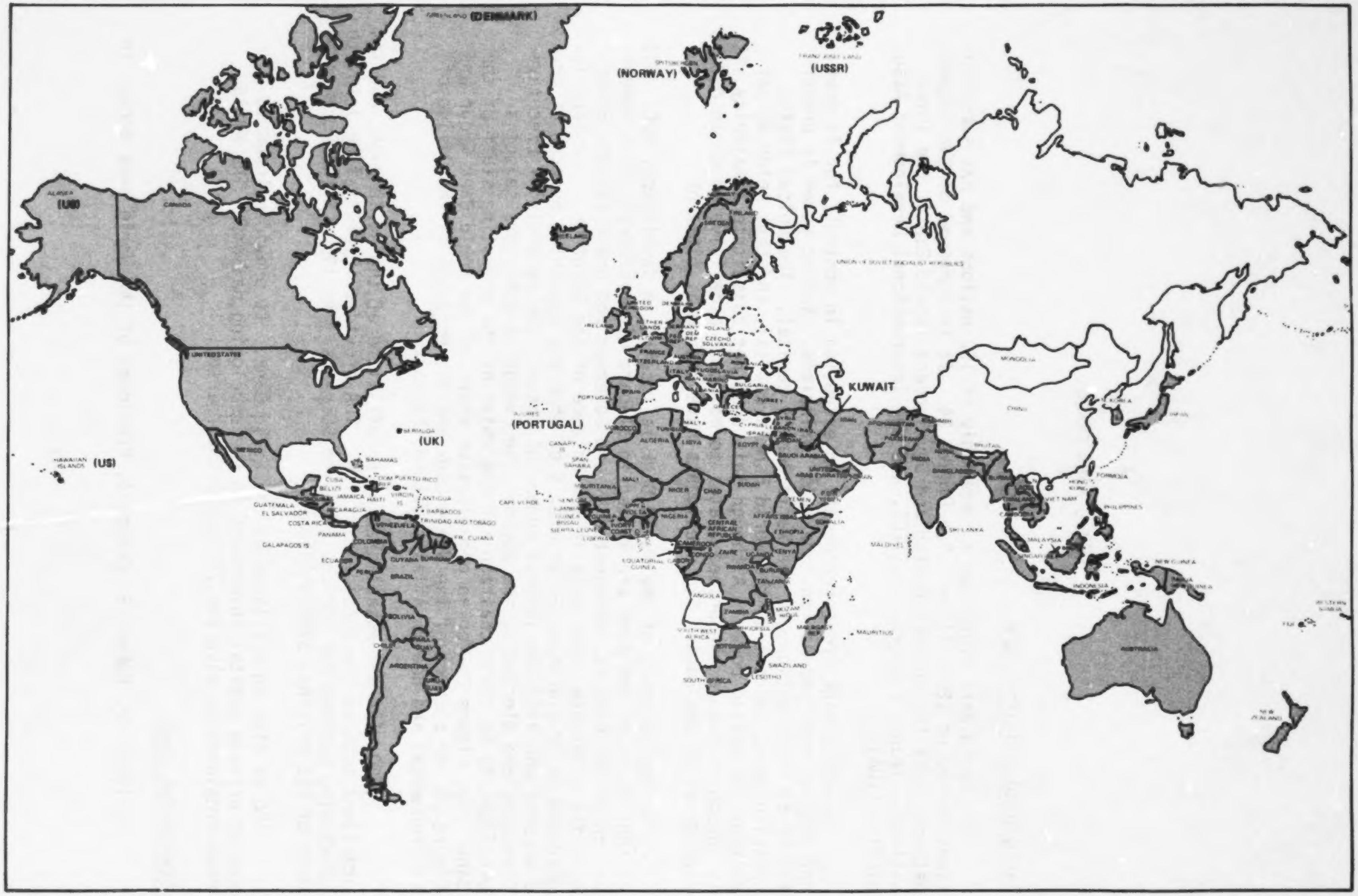

Figure 24. The shaded portion shows the 132 member nations of the International Bank for Reconstruction and Development (World Bank) as of January 1978.

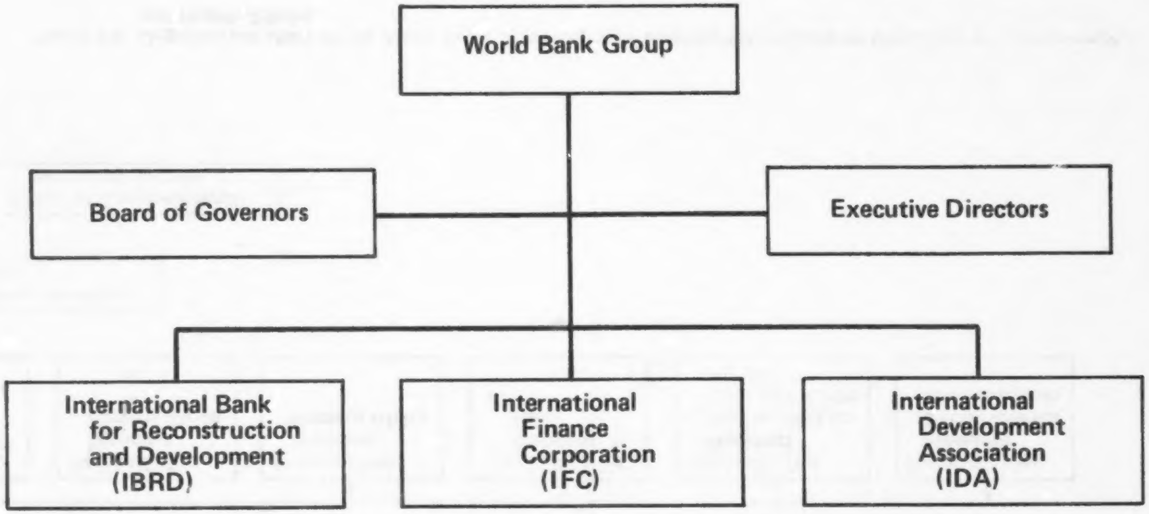
World Bank Group
Board of Governors
Executive Directors
International Bank for Reconstruction and Development (IBRD)
International Finance Corporation (IFC)
International Development Association (IDA)

Figure 25. Organization chart of the World Bank Group.

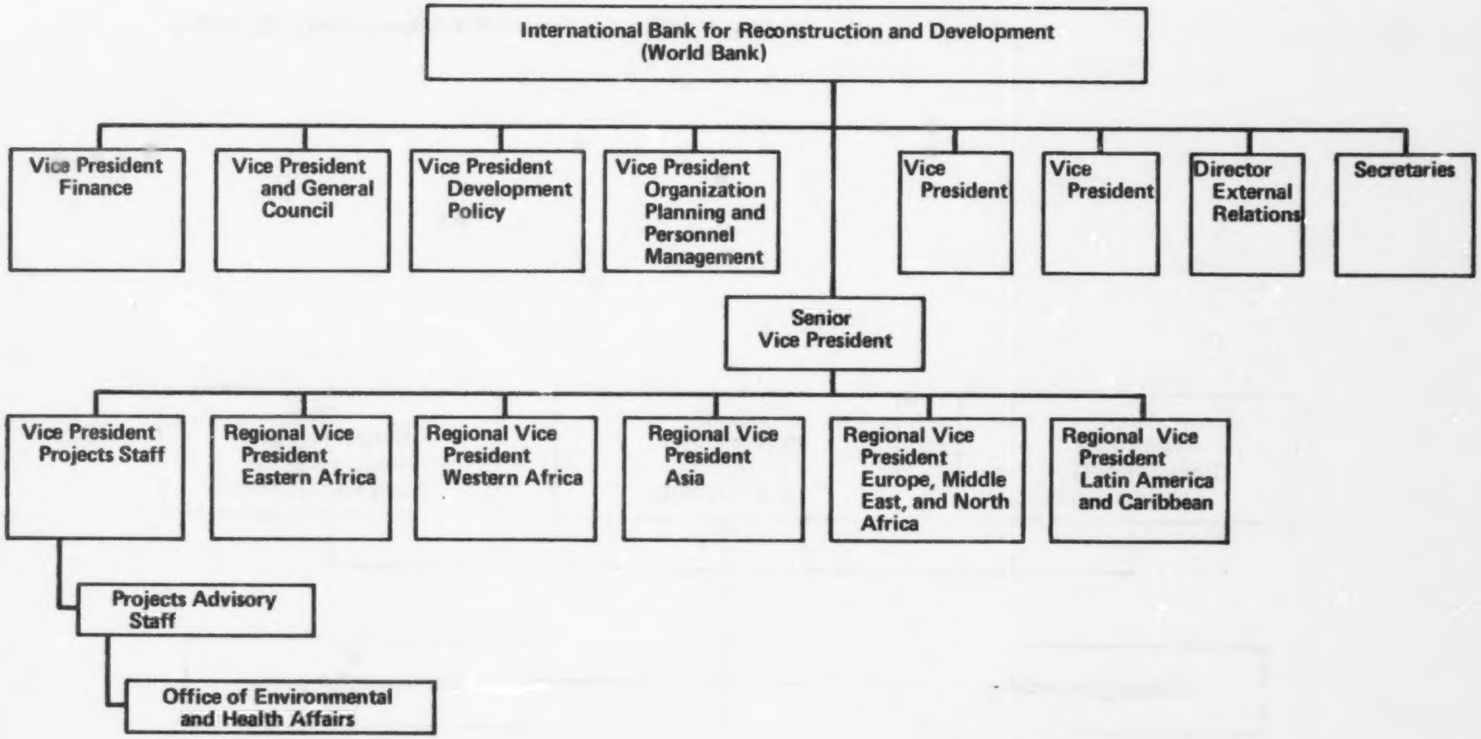
International Bank for Reconstruction and Development (World Bank)
Vice President Finance
Vice President and General Council
Vice President Development Policy
Vice President Organization Planning and Personnel Management
Vice President
Vice President
Director External Relations
Secretaries
Senior Vice President
Vice President Projects Staff
Regional Vice President Eastern Africa
Regional Vice President Western Africa
Regional Vice President Asia
Regional Vice President Europe, Middle East, and North Africa
Regional Vice President Latin America and Caribbean
Projects Advisory Staff
Office of Environmental and Health Affairs

Figure 26. Organization chart of the World Bank operating staff showing the position of the Office of Environmental and Health Affairs.

an address to ECOSOC remarked that spending a little to prevent environmental damage could save a lot when one considered how expensive damage to the environment could be. He announced that a unit had been established to determine the environmental consequences of development projects being considered for financing.

Late in 1970, the position of Environmental Advisor was established within the World Bank. The function of this position was "to review and evaluate every investment project from the standpoint of its potential effects on the environment." Initial staff guidelines were expanded and published by the new Environmental Office in a 1972 handbook, "Environmental, Health, and Human Ecologic Considerations in Economic Projects." An expanded English edition was published in 1974.

At the 1973 Annual Meeting of the Board of Governors of the World Bank, Robert S. McNamara announced the establishment within the Bank of an Office of Environmental Affairs. Its procedure allows other agencies to evaluate development projects prior to the World Bank Group's evaluation. These agencies include the UN Development Program and the World Health Organization. Should the World Bank Group determine that safeguarding or mitigating measures are needed, cost for these measures is incorporated into the financing of the project. The progress in assuring compliance with these measures is monitored by both the World Bank Group's appropriate Regional Office and the Office of Environmental and Health Affairs. Checklists have been developed for a number of sectors including textiles, tourism, power stations, paper plants, steelmaking, irrigation systems, fertilizer factories, harbor facilities, and more. Safeguards have been negotiated on a number of projects at a typical incremental cost of about 2 to 3 percent of the total cost of the project.

The World Bank Group has used a project-by-project approach in its assessments and plans to continue using this approach. However, it is preparing to consider funding environmental projects as development projects. The strategy used by the World Bank Group is the rendering of discretionary benefits.

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XI

UNITED NATIONS ENVIRONMENT PROGRAM (UNEP)

Background and Structure

In the summer of 1968, the Swedish Government placed on the agenda of the United Nations Economic and Social Council (ECOSOC) an item on the "human environment" which would lead to the creation of the United Nations Environment Program (UNEP). Later in 1968, the UN General Assembly decided to convene a UN conference on the Human Environment.

Nongovernmental international organizations were involved in preparing for the Conference. These included the International Union for Conservation of Nature and Natural Resources and the International Council of Scientific Union (ICSU) through its Scientific Committee on Problems of the Environment (SCOPE). Under the auspices of the Institute on Man and Science of Rensselaerville, New York and the Aspen Institute for Humanistic Studies, an international workshop was held in Aspen, Colorado in May 1971 to set general institutional guidelines for decision-making for the Conference.

The UN Conference on the Human Environment was held in Stockholm, Sweden in June 1972. The General Assembly of the UN at its Twenty-Seventh Session created UNEP on 15 December 1972 with (1) a Governing Council for the Environment Program composed of 58 member nations elected by the General Assembly, (2) a small Environment Secretariat to serve as a focal point for environmental coordination within the UN, (3) an Environment Fund to finance environmental programs, and (4) an Environmental Coordination Board directed by an Executive Director. The Secretariat serves the Governing Council. The Council determines the use of the Environment Fund and prescribes initiatives in response to the Action Plan for the Human Environment. See Figures 27 and 28.

Strategies Used

The first session of the Governing Council of UNEP was held in Geneva, 12 to 22 June 1973. It considered an Action Plan for the Environment, the Environment Fund, and the UN Conference titled Exposition on Human Settlements scheduled for 1976 in Vancouver, British Columbia. The Action Plan was adopted establishing Earthwatch which will be addressed later.

In accordance with the General Assembly decision, UNEP headquarters was established at Nairobi, Kenya on 1 October 1973. The Environment Coordination Board held two 1-day sessions, one in Geneva on 9 April 1973, and one

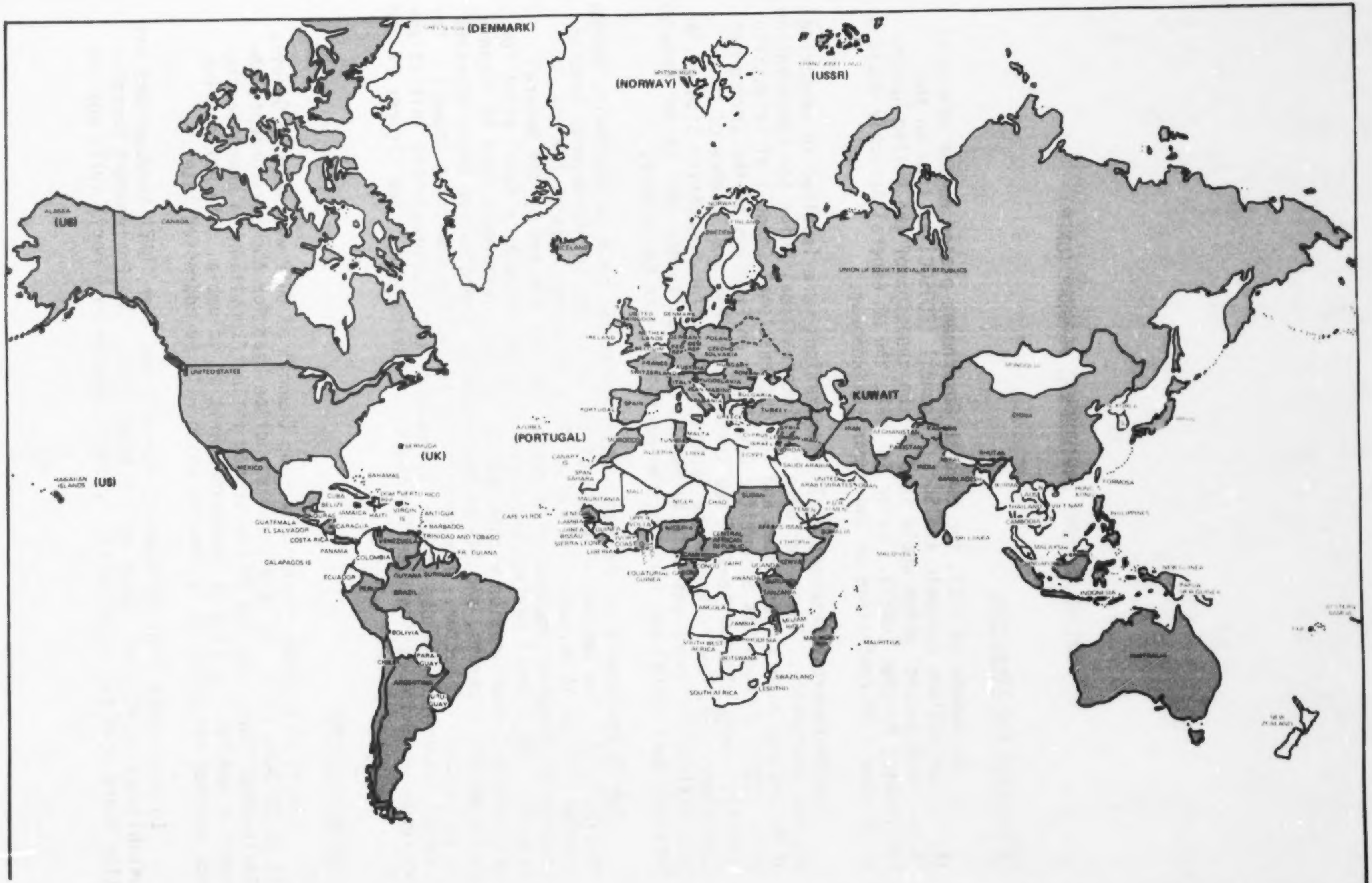

Figure 27. The shaded portion shows the initial 58 member nations of the United Nations Environment Program in 1973. Each has a 3 year term with one-third of them being elected by the U.N. General Assembly each year.

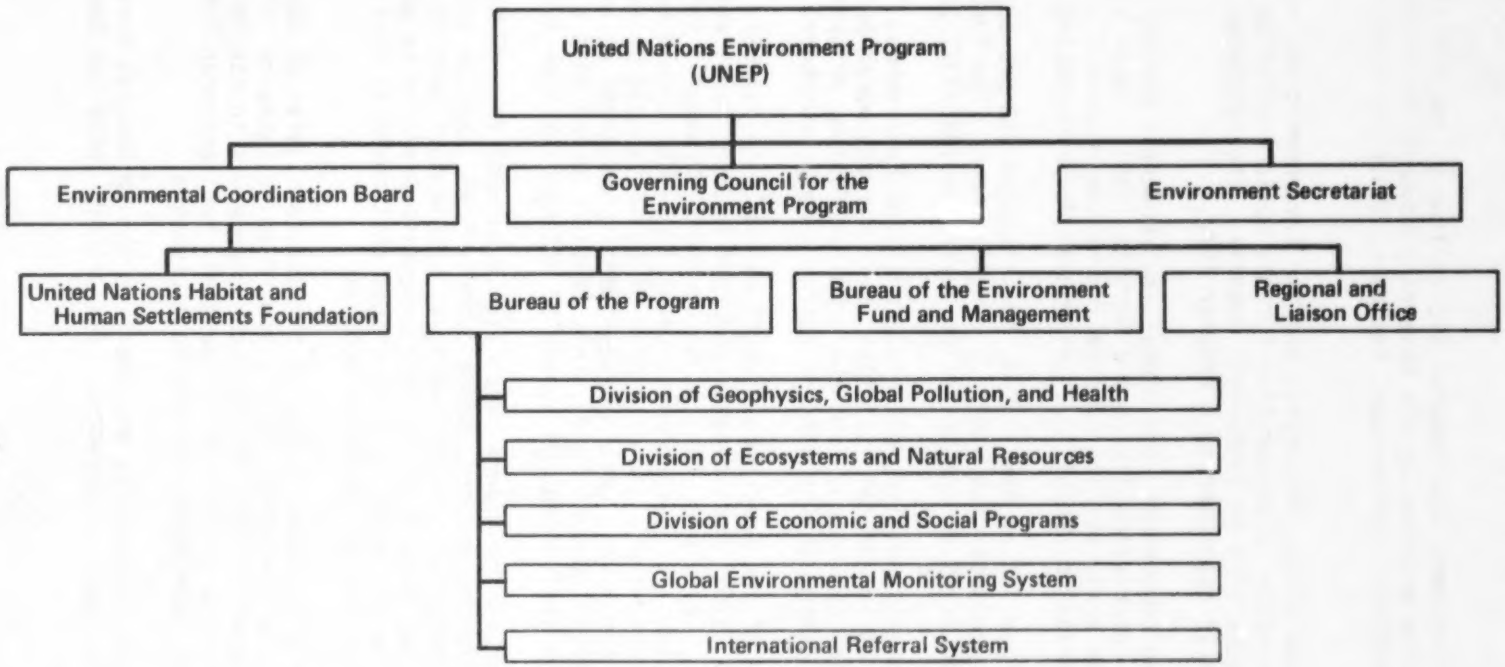
United Nations Environment Program (UNEP)
Environmental Coordination Board
Governing Council for the Environment Program
Environment Secretariat
United Nations Habitat and Human Settlements Foundation
Bureau of the Program
Bureau of the Environment Fund and Management
Regional and Liaison Office
Division of Geophysics, Global Pollution, and Health
Division of Ecosystems and Natural Resources
Division of Economic and Social Programs
Global Environmental Monitoring System
International Referral System

Figure 28. Organization chart of the United Nations Environment Program.

in New York on 23 October 1973. It considered UNEP organizational cooperation with UN members.

The voluntary Environment Fund reached $12 million by the end of 1973. In 1973, 78 projects were approved by the Governing Council for support by UNEP, primarily for meetings, conferences, seminars, training courses, and workshops.

A Symposium on Population, Resources, and the Environment was convened by the Population Commission in preparation for the World Population Conference scheduled for August 1976 in Bucharest, Romania. The symposium was held in Stockholm from 26 September to 5 October 1973.

Earthwatch has two components, the Global Environmental Monitoring System (GEMS) and the International Referral Service (IRS). These systems are designed to provide early warning of significant environmental risks. They also provide information useful in governmental decision-making.

The Environment Fund, as of April 1975, had financed 250 projects; about half were cooperative projects with other UN organizations. The Fund has $113 million pledged to it by UN member nations over the 1973-1977 period.

UNEP also prepares an annual report, "State of the Environment." The 1975 report addresses environmental pollution as it affects human health. It also addresses marine pollution, food chain contamination, drinking-water-supply pollution, and damage to the earth's buffer zone (atmosphere).

The Third Session of the Governing Council was held in Nairobi, Kenya from 19 April to 2 May 1975. Participants endorsed a three-level approach for their Action Plan: Level One--the "State of the Environment" should identify emerging problems for governments; Level Two--UNEP should be based on objectives set by governments and a program of action should be established to meet those objectives; Level Three--identify projects at Level Two for funding by the Environment Fund. This Session agreed that a second Conference on the Human Environment be scheduled not earlier than 1980.

The Fourth Session of the Council was held in Nairobi from 30 March to 14 April 1976. Participants decided, among other things, that an International Register of Potentially Toxic Chemicals should form part of UNEP's Earthwatch Program. They also requested the Executive Director to explore with the World Bank ways and means to ensure that environmental considerations be taken into full account in their program.

The Conference of Plenipotentiaries of the Coastal States of the Mediterranean Sea was held in Barcelona, Spain, from 2 to 16 February 1976. One of the resolutions adopted by this 15-state conference was to ask UNEP to convene a meeting in Monaco in 1977 to review their Mediterranean Action Plan for protection and improvement of the Mediterranean.

UNEP was created by legislative enactment in the UN General Assembly to protect and enhance the human environment. Its primary focus has been to cultivate understanding and attitudes; however, its potential is growing for rendering benefits in the form of information from environmental monitoring. The potential is also present for rendering discretionary benefits through its Environmental Fund.

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XII

WORLD HEALTH ORGANIZATION (WHO)

Background and Structure

A declaration was adopted at the 1945 United Nations San Francisco Conference that drew attention to the need for an international health organization. A Technical Preparatory Committee representing 16 nations met in Paris from 18 March to 5 April 1946 to draft a constitution for consideration at an International Health Conference. On 22 July 1946, 61 nations of the International Health Conference met in New York and signed the constitution of the World Health Organization (WHO), and the WHO Interim Commission was simultaneously established. The constitution became effective when it was ratified by 26 nations on 7 April 1948. The first World Health Assembly met in Geneva from 24 June to 24 July 1948. WHO took over the functions of the Office International d'Hygiene Publique, the League of Nations Health Organization, and the peacetime work of the Health Division of the UN Relief and Rehabilitation Agency. WHO became a specialized agency of the UN on 1 September 1948. In 1949, the Pan American Sanitary Bureau became the WHO Regional Office for the Americas.

The purpose of WHO is to attain the highest possible level of personal health for all. The WHO constitution defines health as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity."

WHO devotes its efforts to health problems of nations that cannot solve them with their own resources. A large portion of these efforts goes to giving technical assistance and advice and providing technical publications. WHO has set international standards for biological substances and for pesticides. WHO has drawn up and administered international health regulations.

There are 147 nations belonging to WHO, each represented in the World Health Assembly. The Assembly meets annually in Geneva. WHO's activities are governed by the World Health Assembly and an Executive Board. The Executive Board is derived from the designation of eight member nations annually by the Assembly, and those designated in turn name a person to serve on the Board for a period of three years. The Board has 24 members and meets twice each year. The Board normally devotes one year to a specific problem (e.g., publications). A Secretariat of WHO is headed by a Director-General and several Assistant Directors-General (each responsible for a number of Divisions) reporting to him. The headquarters is in Geneva and employs 4,500 people. WHO is distinctive in having several regional offices, each responsible for activities in its respective area. Regional offices are located at Brazzaville, Congo for Africa; Washington, D.C. for the Americas; Alexandria, Egypt for the eastern Mediterranean; Copenhagan, Denmark for Europe; New Delhi, India for Southeast Asia; and Manila, the Philippine Islands for the western Pacific. See Figures 29 and 30.

The regional office for the Americas is the same as that for PAHO. PAHO predates WHO as the International Sanitary Bureau, the parent entity of PAHO. The Bureau was formed as a result of the Second International Conference of American States in Mexico City in 1902. Eleven nations were represented. This was a time of epidemics of smallpox, malaria, typhus, and yellow fever. These epidemics resulted in stringent quarantines among nations. An international sanitary policy was adopted, periodic public health conventions were planned, and an executive board, the International Sanitary Bureau, was established in Washington, D.C. PAHO's Pan American Center for Sanitary Engineering and Environmental Sciences is located in Lima, Peru. This Center deals with air and water pollution and community planning. PAHO has recently, in its growing efforts in environmental health sciences, established a Pan American Center for Human Ecology and Health in Mexico City. This Center examines the health effects of air, soil, and water pollutants on man and develops indices of environmental quality.

PAHO has six area offices in addition to its headquarters office. Area I Office is located in Caracas, Venezuela, serving Barbados, Belize, Guyana, Jamaica, Trinidad and Tobago, Venezuela, and some of the possessions of France, the Netherlands, and the United Kingdom in the Americas. Area II Office is located in Mexico City, serving Cuba, the Dominican Republic, Haiti, and Mexico. Area III Office is located in Guatemala City, Guatemala, serving Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama. Area IV Office is located in Lima, serving Bolivia, Colombia, Ecuador, and Peru. Area V Office is located in Brasilia, serving Brazil. Area VI Office is located in Buenos Aires, Argentina, serving Argentina, Chile, Paraguay, and Uruguay. The Washington, D.C. Office is responsible for the United States, its possessions, and Canada. A field office in El Paso, Texas is concerned with health along the United States and Mexican border. See Figures 31 and 32.

Strategies Used

WHO documented its early interest in pollution control in 1961 with a monograph concerning air pollution. Before 1961 WHO was concerned with sanitation, including water pollution and solid waste disposal. In 1963, WHO sponsored an Inter-Regional Symposium on Criteria for Air Quality and Methods of Measurement. A WHO Expert Committee on Environmental Health Aspects of Metropolitan Planning and Development noted in 1964 that noise and vibration exert deleterious effects especially on the nervous system. At an October 1968 Symposium on Urban Climates and Building Climatology jointly sponsored by both WHO and WMO, it was stressed that regard must be given to predicting pollution levels.

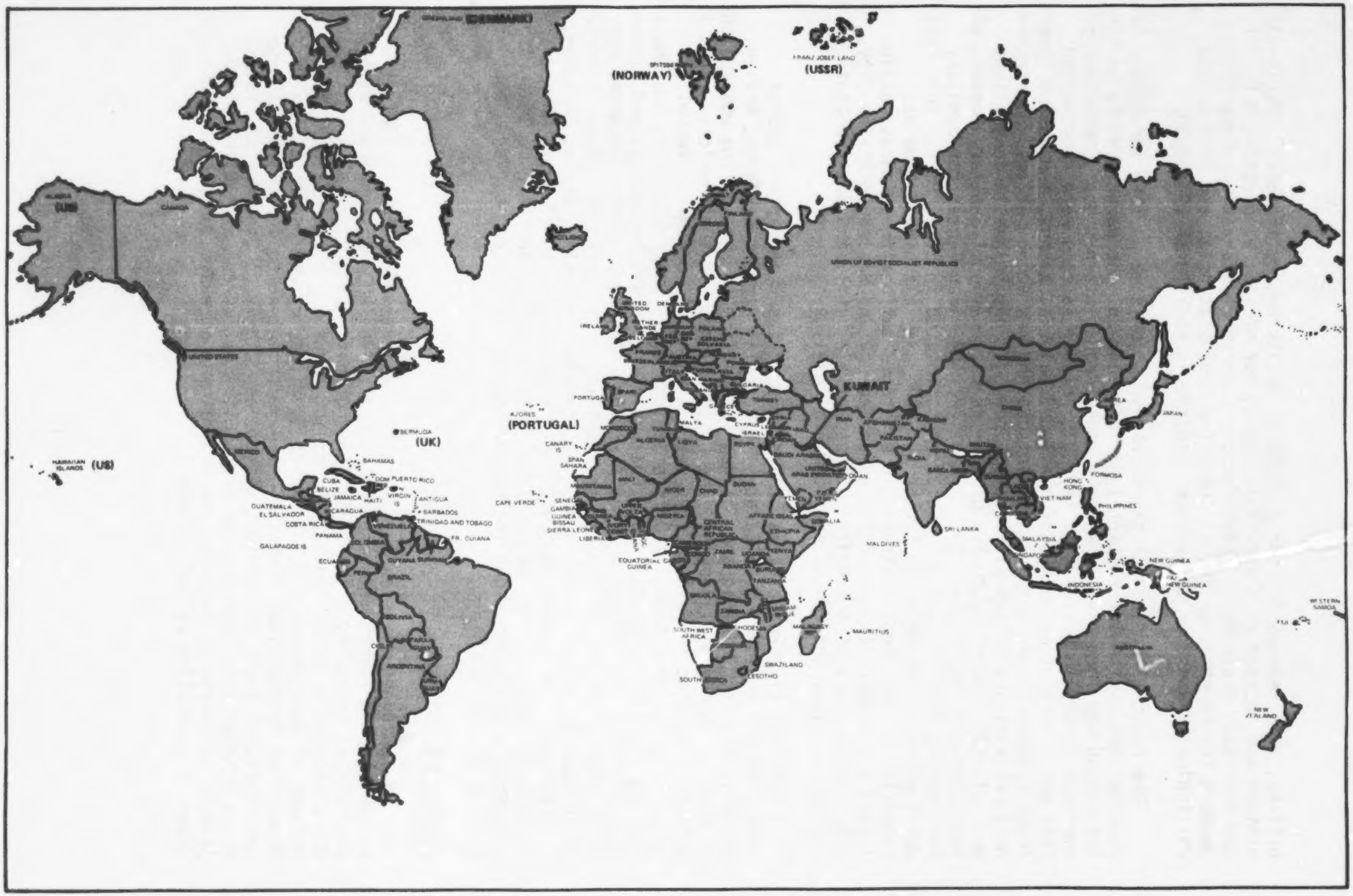


Figure 29. The shaded portion shows the 147 member nations of the World Health Organization as of January 1978.

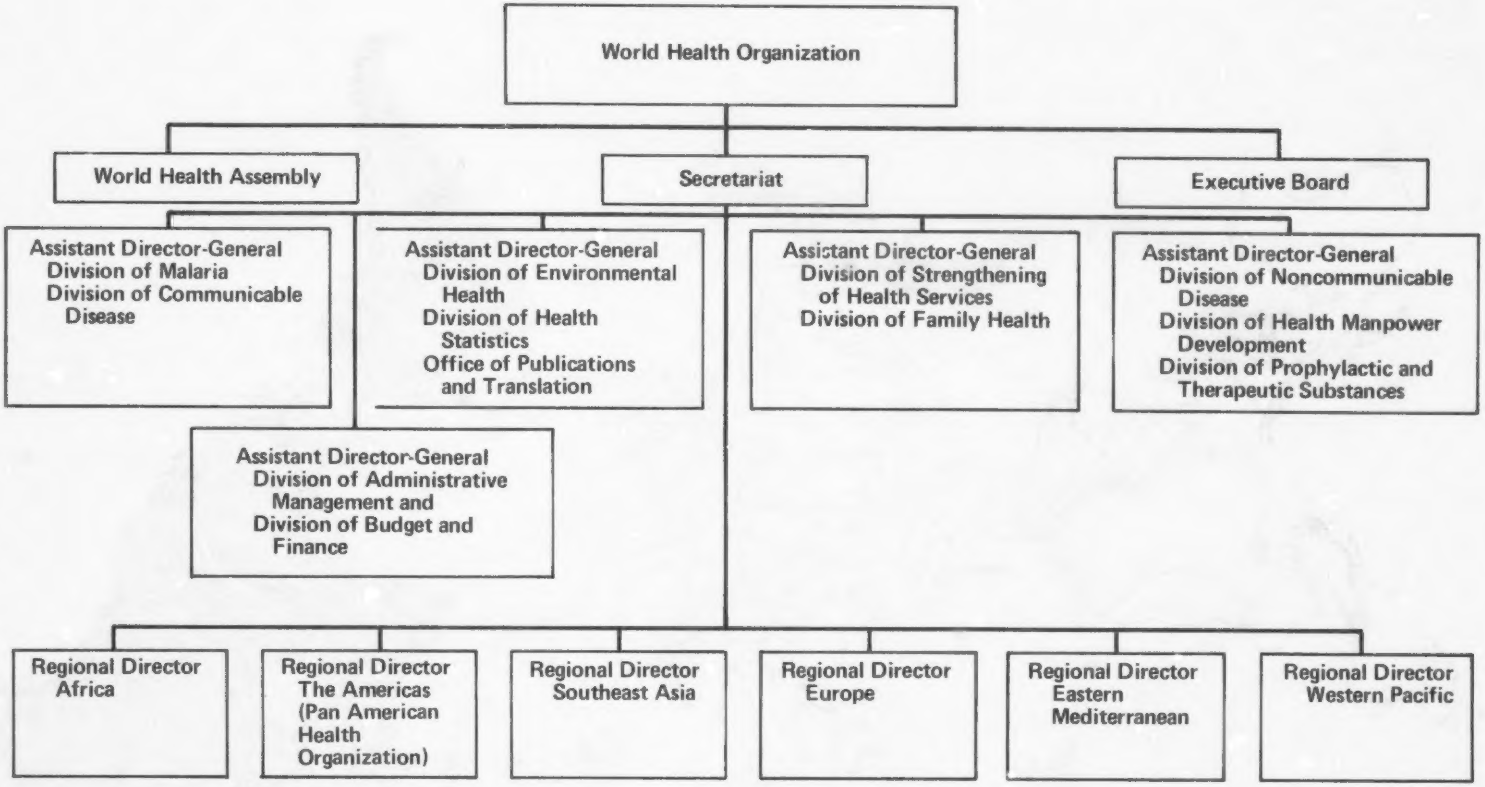

World Health Organization
World Health Assembly
Secretariat
Executive Board
Assistant Director-General Division of Malaria Division of Communicable Disease
Assistant Director-General Division of Environmental Health Division of Health Statistics Office of Publications and Translation
Assistant Director-General Division of Strengthening of Health Services Division of Family Health
Assistant Director-General Division of Noncommunicable Disease Division of Health Manpower Development Division of Prophylactic and Therapeutic Substances
Assistant Director-General Division of Administrative Management and Division of Budget and Finance
Regional Director Africa
Regional Director The Americas (Pan American Health Organization)
Regional Director Southeast Asia
Regional Director Europe
Regional Director Eastern Mediterranean
Regional Director Western Pacific

Figure 30. Organization chart of the World Health Organization.

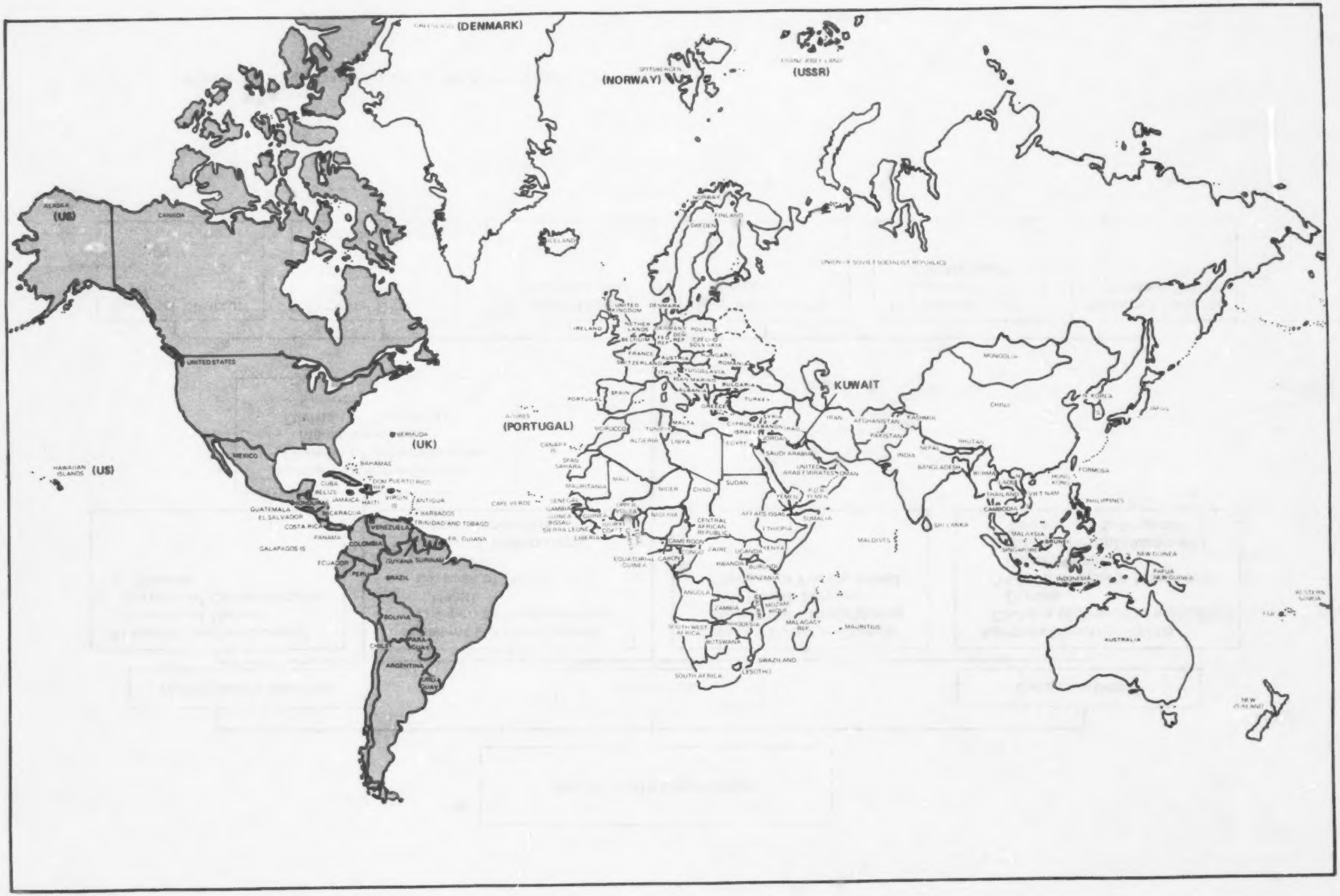
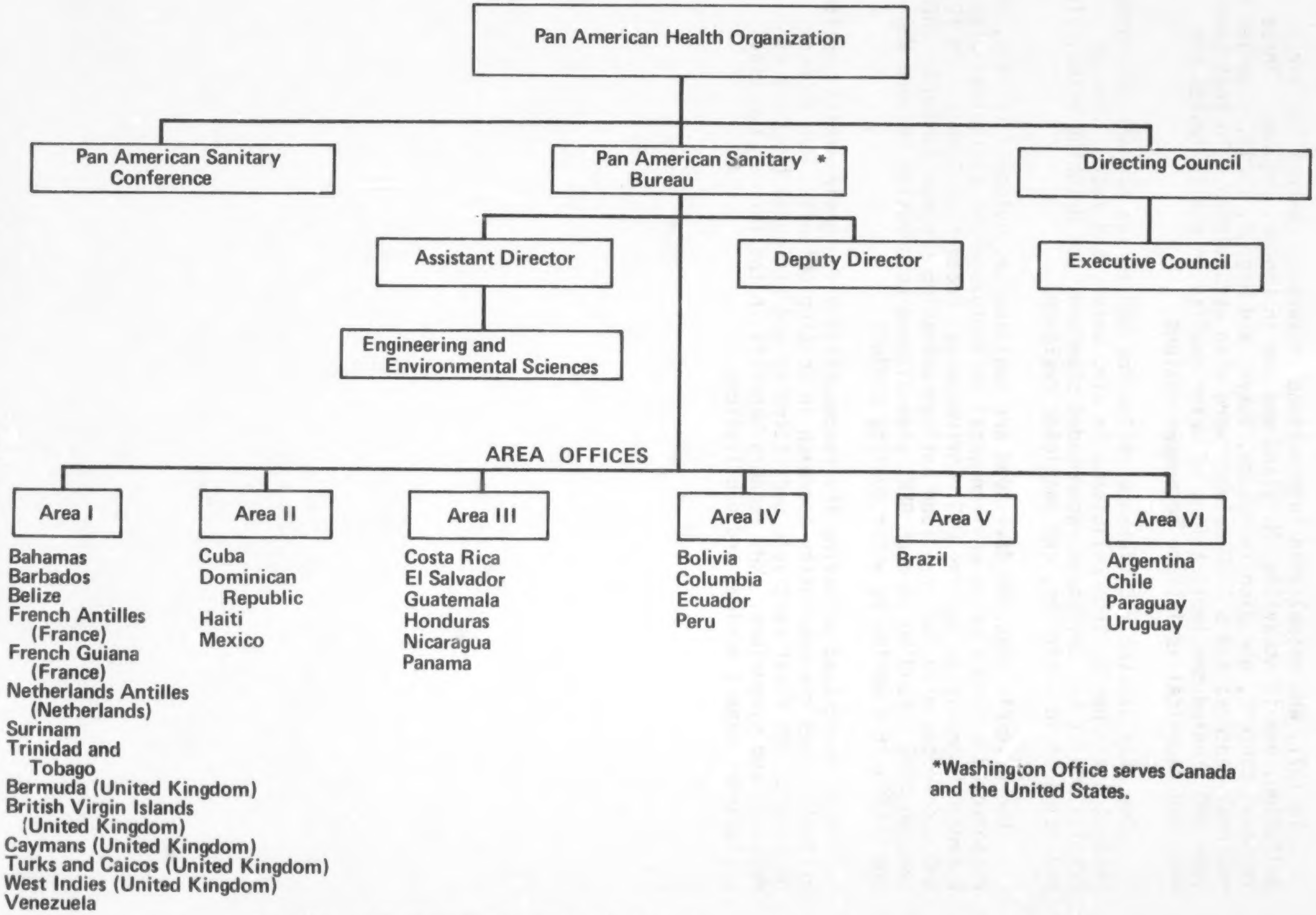


Figure 31. The shaded portion shows the 27 nations belonging to the Pan American Health Organization as of April 1978.



*Washington Office serves Canada and the United States.

Figure 32. Organization chart of the Pan American Health Organization.

In 1971, WHO established international reference centers for air pollution, one in Rockville, Maryland and one in London, England. Three regional centers, one each in Moscow, Tokyo, and Nagpur, India; a series of national centers; and a PAHO network were also established. In that same year WHO studied the implications of water quality on public health and provided technical assistance to member nations.

The 1972 Stockholm Conference called for WHO to set primary standards to protect human health from pollutants in air, water, and food. Through resolutions it has developed recommended standards for drinking water, air pollution, food additives, and pesticide residues.

The criteria that WHO developed are published as guides. In 1974, WHO cosponsored a symposium on environmental epidemiology and toxicology with the European Communities and the U.S. Environmental Protection Agency. In 1975, WHO cooperated with FAO in a food anticontamination program funded by UNEP through GEMS. Funding through GEMS also allowed cooperation between WHO and UNESCO in a worldwide water quality project.

WHO, recognized as having the responsibility for environmental health criteria, uses the resolution approach in setting criteria, but depends on experts who first cultivate understanding and attitudes by means of meetings and symposiums. WHO renders benefits in the form of technical assistance, expert advice, and publications.

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XIII

WORLD METEOROLOGICAL ORGANIZATION (WMO)

Background and Structure

The World Meteorological Organization (WMO) was set up in 1951 and became a specialized agency of the UN in December of that same year. A World Meteorological Convention was adopted in Washington, D.C. in 1947. This Convention was ratified by enough nations in 1951 so that WMO, a governmental organization, replaced the International Meteorological Organization, a nongovernmental organization that had been established in 1873. The World Meteorological Congress approved a draft of an agreement between the UN and WMO in 1951 which would recognize WMO as a specialized agency of the UN. The UN General Assembly approved the agreement in December 1971. There are 147 member nations as shown in Figure 33. Each member maintains its own meteorological service.

WMO consists of a Congress, an Executive Committee, a Secretariat, six regional associations, and eight technical commissions. The Congress, composed of representatives of all member nations, is the supreme power of WMO and meets at least once every 4 years to set policy and to plan a program and a budget. The Executive Committee, WMO's decision-making body, has 21 members and meets annually. Some nations are permanent representatives while others take turns as representatives. The Executive Committee administers, finances, and ensures that activities are conducted as the Congress has decided. The Secretariat, headed by a Secretary-General, is the permanent staff of WMO. Based in Geneva, it carries out the technical and administrative work of WMO and coordinates the work of eight Commissions. The regional associations, made up of members located within their respective regions, are responsible for carrying out tasks as assigned by the Congress and Executive Committee. The technical commissions are composed of members nominated by other members, and they are responsible for maintaining knowledge in and promoting development of their respective fields. See Figures 34 and 35.

There are two groupings of technical commissions. A basic grouping consists of the three commissions: the Commission for Basic Systems and the Commission for Instruments and Methods of Observation are responsible for basic operations and facilities; the Commission for Atmospheric Sciences is responsible for research in atmospheric sciences.

The other grouping consists of five applications commissions: the Commission for Aeronautical Meteorology, the Commission for Agricultural Meteorology, the Commission for Marine Meteorology, the Commission for

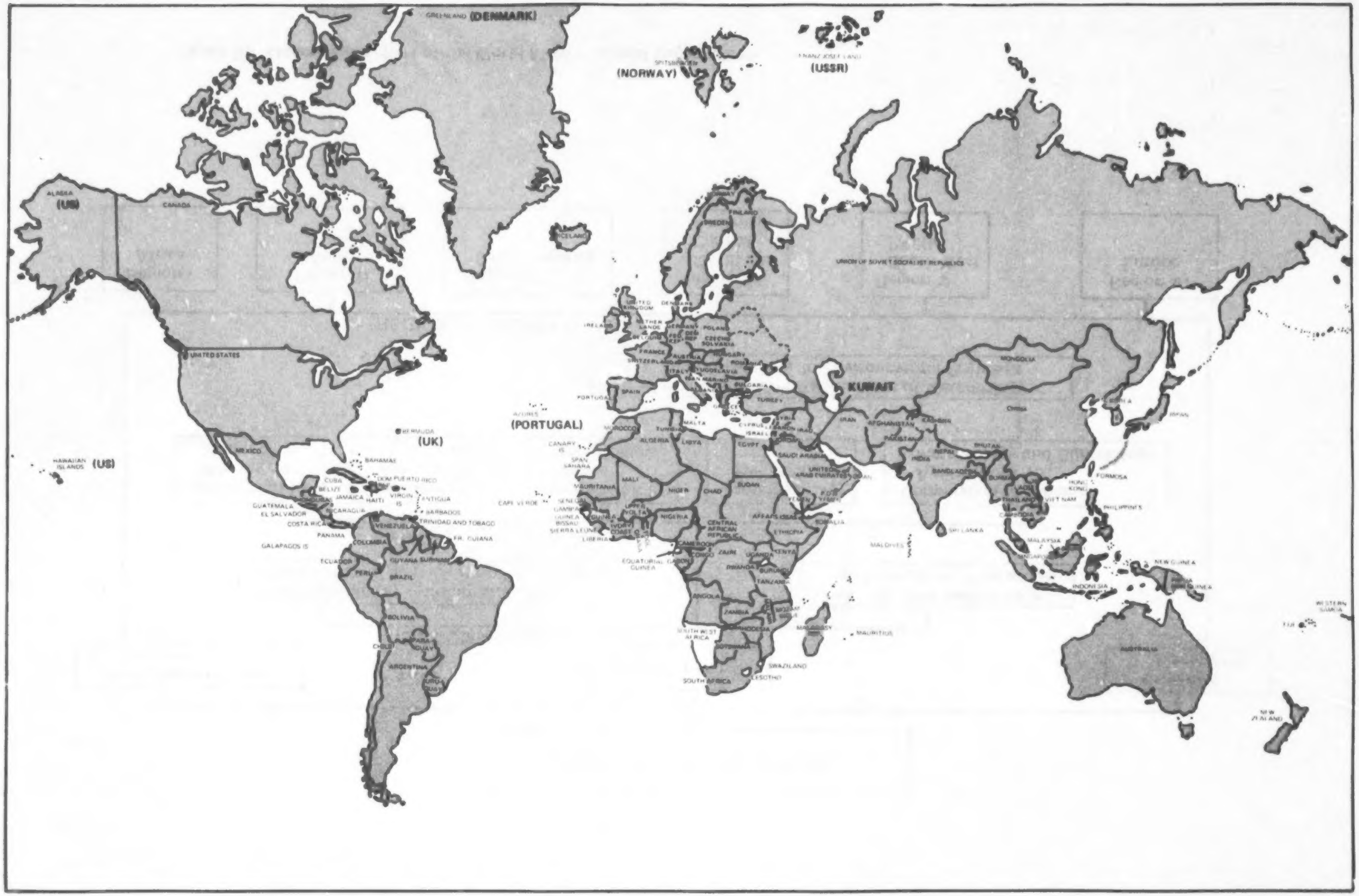

Figure 33. The shaded portion shows the 147 member nations of the World Meteorological Organization as of January 1978.

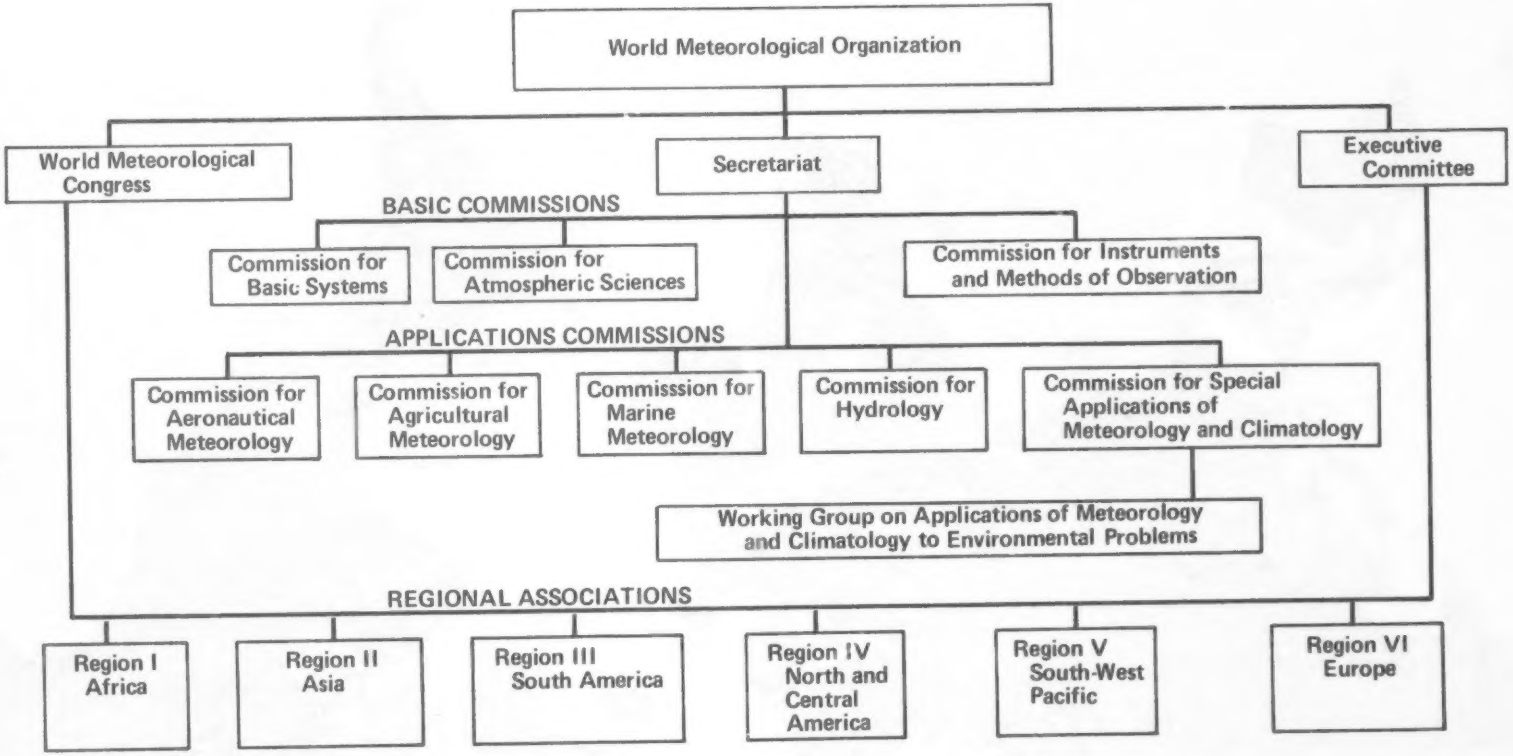
World Meteorological Organization
World Meteorological Congress
Secretariat
Executive Committee
BASIC COMMISSIONS
Commission for Basic Systems
Commission for Atmospheric Sciences
Commission for Instruments and Methods of Observation
APPLICATIONS COMMISSIONS
Commission for Aeronautical Meteorology
Commission for Agricultural Meteorology
Commisssion for Marine Meteorology
Commission for Hydrology
Commission for Special Applications of Meteorology and Climatology
Working Group on Applications of Meteorology and Climatology to Environmental Problems
REGIONAL ASSOCIATIONS
Region I Africa
Region II Asia
Region III South America
Region IV North and Central America
Region V South-West Pacific
Region VI Europe

Figure 34. Organization chart of the World Meteorological Organization.

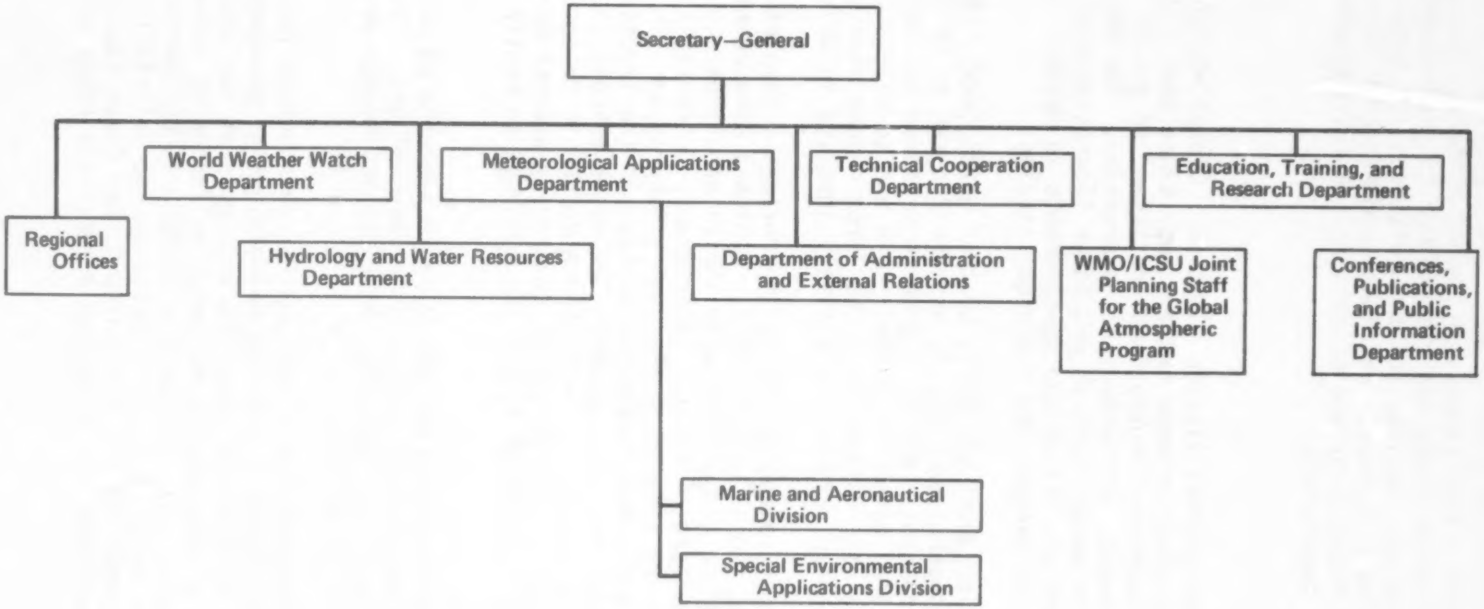
Secretary—General
Regional Offices
World Weather Watch Department
Hydrology and Water Resources Department
Meteorological Applications Department
Marine and Aeronautical Division
Special Environmental Applications Division
Technical Cooperation Department
Department of Administration and External Relations
WMO/ICSU Joint Planning Staff for the Global Atmospheric Program
Education, Training, and Research Department
Conferences, Publications, and Public Information Department

Figure 35. Organization chart of the staff of the World Meteorological Organization.

Hydrology, and the Commission for Special Applications of Meteorology and Climatology. These are responsible for promoting applications to economic and social activities. The latter Commission, among other responsibilities, considers applications of meteorology and climatology to environmental problems such as human ecology, health, and the relationships between disease and air pollution including both short- and long-term effects. A Working Group on Applications of Meteorology and Climatology to Environmental Problems reports to this Commission.

Strategies Used

WMO provides an international liaison function. Global exchange of meteorological data takes place between nations many times each day. International guidelines and technical regulations are issued to assure necessary standardization of instruments and methods of observation. The WMO Bulletin is published quarterly for member nations and other interested parties to provide information on WMO activities and developments in meteorology. WMO also publishes a variety of manuals and technical studies.

WMO has four main programs: the World Weather Watch (WWW), the Research Program, the Technical Cooperation Program, and the Program on the Interaction of Man and His Environment. WWW is a program designed to improve the collection of meteorological data on a global scale and to ensure complete availability of this data internationally. The first 4-year plan was approved in 1967. Developing nations are actively involved in this program.

The Research Program is aided by WWW which provides a complete system for storing and analyzing global weather data. A Global Atmospheric Research Program, planned in conjunction with the International Council of Scientific Unions, is composed of several subprograms. Large-scale motions of the global atmosphere are studied in the Global Subprogram. The Tropical Subprogram is concerned with deep convection systems in the tropics. The Air/Sea Subprogram is concerned with exchange processes between the atmosphere and its underlying surfaces. The Global Atmospheric Research Program is attempting to enable meteorologists to predict weather more than 10 days in the future. A subprogram to consider methods to modify weather may also be established.

The Technical Cooperation Program participates with the UN Development Program in developing meteorological services in many nations. Training is an integral part of the program. In 1970, technical assistance was provided to 87 nations at a cost of $5 million.

The Program on the Interaction of Man and His Environment includes a broad range of activities aimed at applying meteorological knowledge to human activities. This application spans the interests of the applications commissions. The study of atmospheric and water pollution is increasing. Marine pollution is an especially active area. There is collaboration with other organizations in the Group of Experts on the Scientific Aspects of Marine Pollution (GESAMP) and the Integrated Global Ocean Station System (IGOSS). The Commission for Hydrology directs the study of inland water pollution. Correspondingly, because of WMO's involvement in hydrological studies, Caldwell (p. 178) has suggested that it should be reorganized as the primary agency for global monitoring of geophysical changes. A new name, World Geophysical Organization, was suggested.

The Commission for Agricultural Meteorology has published the results of a study of air pollution damage to crops in a Technical Note entitled, "Air Pollutants, Meteorology, and Plant Injury." A Technical Note, "Urban Climates," has also been published. The following is a chronology of WMO activities concerning environmental pollution.

- At the Twenty-First Session of the WMO Executive Committee (in Geneva from 29 May to 13 June 1969) the topic, "Air Pollution Meteorology," was discussed.
- The UN General Assembly required action of WMO in the study of marine pollution (Resolution 2467B: XXIII).
- The International Oceanographic Commission (IOC) at its Sixth Session in September 1969 adopted a general plan and implementation program of IGOSS.
- WMO was represented by an observer at the First Session of the UN Conference on the Human Environment Preparatory Committee Meeting in New York in March 1970 to draw up guidelines for a conference agenda.
- The Executive Committee of the Panel of Experts on Meteorological Aspects of Air Pollution, at its First Session, 11 to 15 May 1970, in Geneva, estimated that about 10 baseline stations would be needed.
- At an FAO Technical Conference on Marine Pollution in Rome in December 1970, it was suggested that the atmospheric baseline stations should include the ocean environment.
- At the second session of the Preparatory Committee in Geneva in February 1971, WMO offered to host a session of the intergovernmental working group on environmental monitoring. This session was held at WMO headquarters in Geneva in August 1971.
- The Executive Committee Panel of Experts on Meteorological Aspects of Air Pollution held its Third Session in EPA facilities in Raleigh, North Carolina in April 1972. It was noted at that meeting that six members had expressed an interest in a WMO network of stations for the measurement of background air pollution.
- The 1972 Stockholm Conference gave WMO the responsibility to establish 10 baseline stations, remote from all pollution sources, to monitor global trends of atmospheric constituents and properties. WMO was also given the responsibility to set up not less than 100 regional monitoring stations.

- WMO was represented at the second session of the International Coordinating Council for the Man and the Biosphere (MAB) Program of UNESCO held in Paris in April 1973 where the development of MAB was reviewed.

- A Joint WMO/WHO Technical Conference on the Observation and Measurement of Atmospheric Pollution was held in Helsinki, Finland in July and August of 1973. They met regarding background stations, and the Conference was supported by UNEP.

- A Second Session of the Joint IOC/WMO Planning Group for IGOSS met in Geneva in August 1973, and outlined and approved an operational plan for an IGOSS Pilot Project for Marine Pollution Monitoring.

- A Technical Committee for Air Quality under the International Organization for Standardization (IOS) met in Washington, D.C. in September 1973. WMO participated with IOS in setting standards for wind shields used on measurement devices which measure sulfur oxides, carbon monoxide, and particulate matter.

- A WMO consultant visited 11 countries in Region I (Africa) and Region II (Asia) during the latter part of 1975 to initiate the establishment of regional atmospheric pollution stations. This followed a 1974 visit in which advice was given on siting, instrumentation, and operation of regional stations, and training personnel for the regional stations.

- A research and training objectives meeting of MAB's Pollution Monitoring and Research Project was held in Moscow in April 1974.

- As a result of an intergovernmental meeting in Barcelona in January and February 1975, concerning protection of the Mediterranean Sea, IOC and WMO will implement baseline studies by monitoring petroleum hydrocarbons in the marine waters. This will be done within the framework of an IGOSS Pilot Project on Marine Pollution.

- The Fourth Joint Session of the Working Committee for IGOSS and the Executive Committee Panel of Experts on Meteorological Aspects of Ocean Affairs met in Paris in February 1975. There the relevant activities of IOC and WMO regarding the Pilot Project on Marine Pollution Monitoring were reviewed.

- The Seventh World Meteorological Congress met in Geneva in 1975 and noted the concept that the ocean and the atmosphere constitute an inseparable whole in the marine physical environment.

- There was a meeting of experts in Raleigh, North Carolina in September 1975 regarding turbidity measurement. The meeting was requested by the Executive Committee of the Panel of Experts on Environmental Pollution specifically to consider the suitability and availability of sunphotometers.

- A joint WMO/IOC task team met in Grenoble, France in September 1975 to discuss monitoring of marine pollution, especially methods for measuring hydrocarbons entering the sea from the air. That same month IOC, WMO, and UNEP consulted in Malta concerning the coordination of projects in the Mediterranean Sea.

- A WMO consultant visited Kenya in September and October 1975 regarding the placement of a baseline station on Mt. Kenya.

The primary strategy for WMO is rendering benefits in the form of technical assistance (discretionary) and increasingly in the form of information (nondiscretionary). It issues agreed-to regulations for standard instruments and methods and is also heavily involved in the cultivation of understanding and attitudes.

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XIV

FOOD AND AGRICULTURE ORGANIZATION (FAO)

Background and Structure

In 1943 the UN Conference on Food and Agriculture met at Hot Springs, Virginia and recommended actions concerning food and agriculture. Forty-four nations were represented. An Interim Commission of representatives of the 44 nations was established in Washington, D.C. to design an organization to assure that these recommendations were implemented. This work resulted in a conference of 42 nations in Quebec in October 1945 at which FAO was formed. FAO was the first of the permanent specialized agencies of the UN. On 1 February 1946 there were 42 members of FAO. There are now 144 members. See Figure 36.

The purposes of FAO are to:

- Raise the level of nutrition and standard of living of the people of member nations.
- Improve the production and distribution of food and agricultural products.
- Improve the conditions of rural populations.
- Contribute to an expanding world economy. The use of science is a central aim.

FAO is composed of a Conference, a Council, and a Director-General and staff. Each member nation is represented on the Council. Other international organizations may be represented at the Council. Normally the Council meets every 2 years and it determines policy and approves a budget. The Council consists of 24 member nations elected by the Conference; either the Conference or Council may establish commissions. The Director-General is appointed by the Conference. He has full power to direct the work of FAO and to appoint its staff. Four departments involved in environmental matters are: Economic and Social Policy, Agriculture, Fisheries, and Forestry. See Figure 37.

Strategies Used

FAO experiences a dual environmental problem. Some of the activities FAO encourages result in pollution; other activities FAO is involved in are

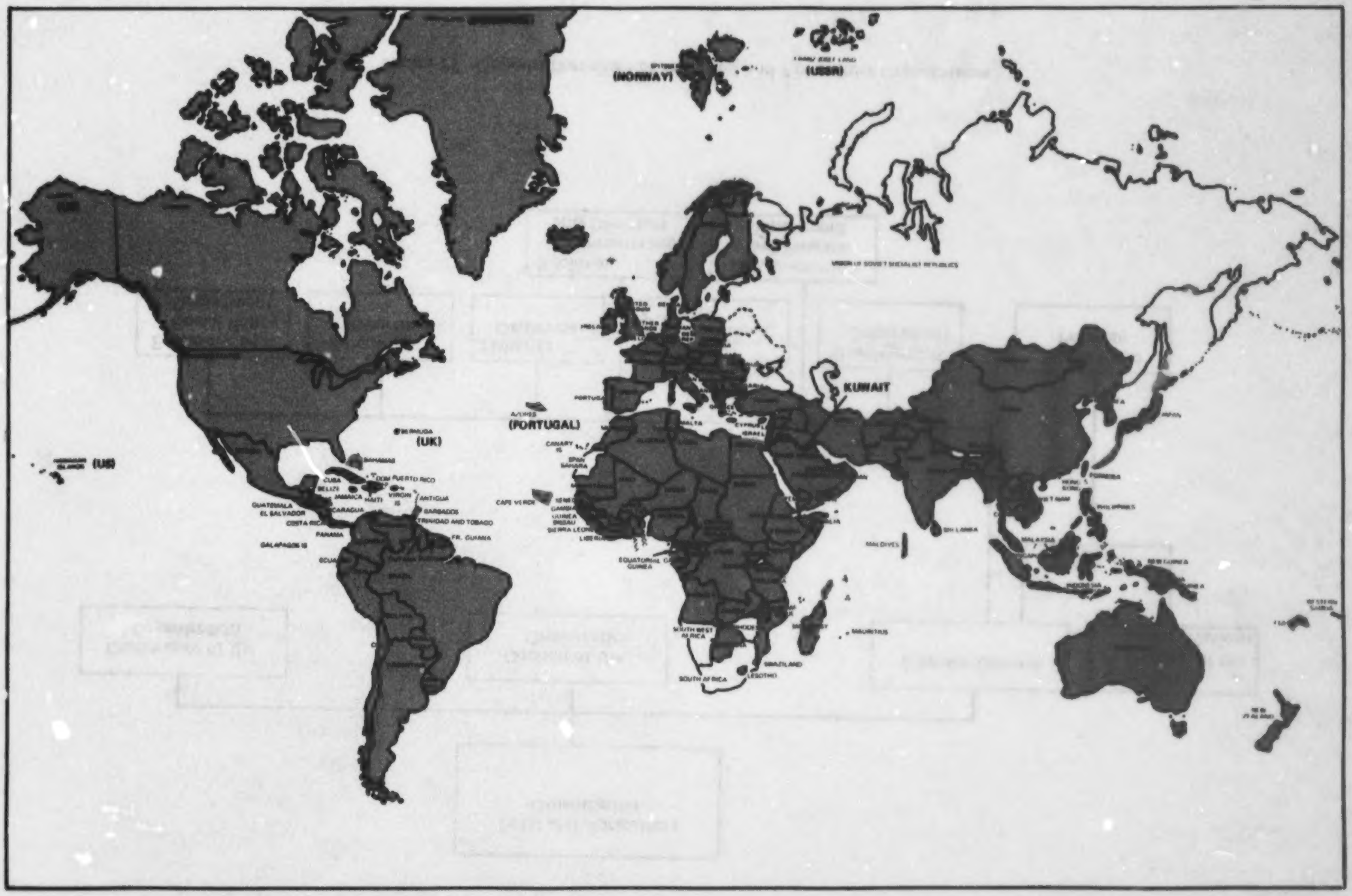

Figure 36. The shaded portion shows the 144 member nations of the Food and Agriculture Organization of the United Nations as of January 1978.

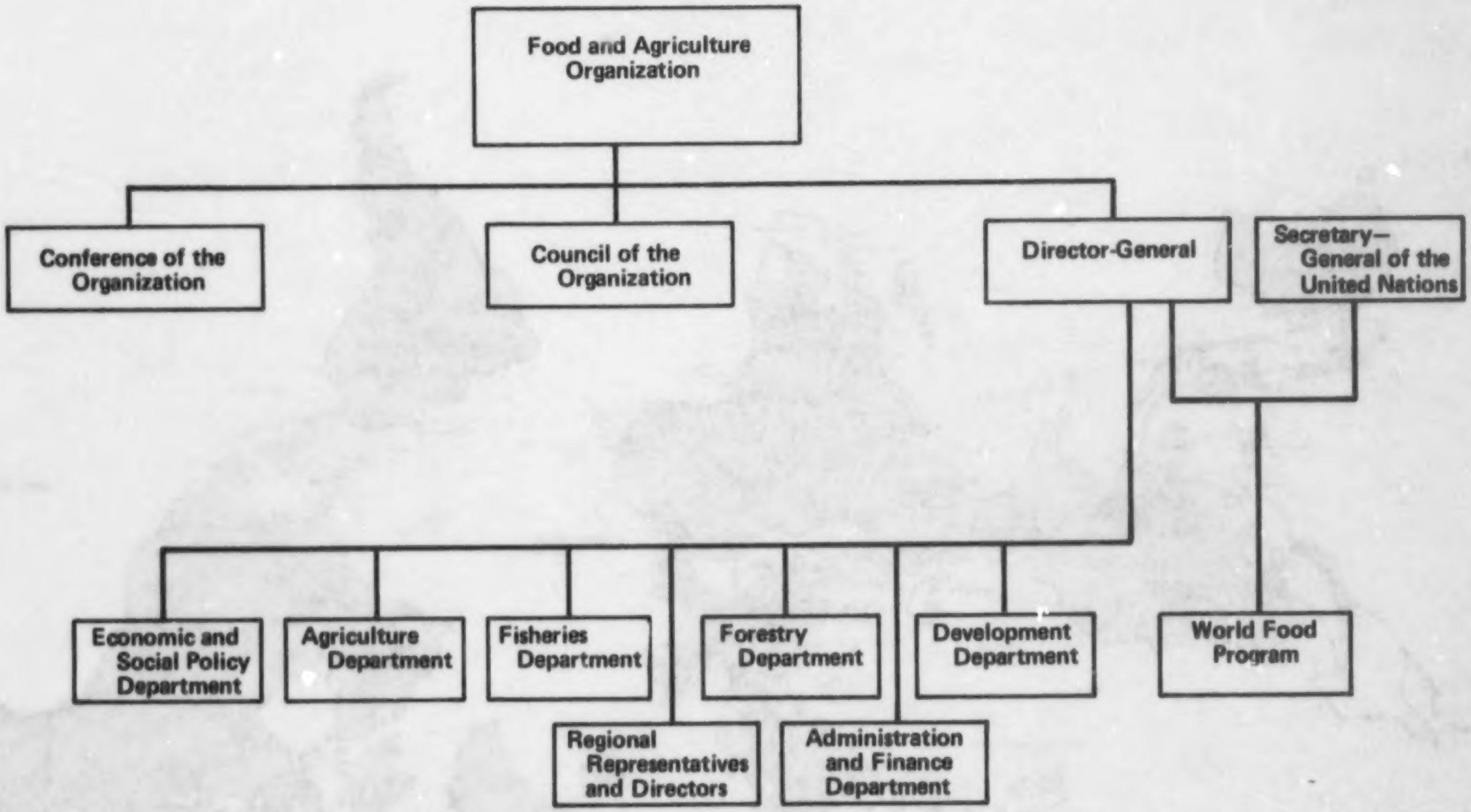
Food and Agriculture Organization
Conference of the Organization
Council of the Organization
Director-General
Secretary—General of the United Nations
Economic and Social Policy Department
Agriculture Department
Fisheries Department
Forestry Department
Development Department
World Food Program
Regional Representatives and Directors
Administration and Finance Department

Figure 37. Organization chart of the Food and Agriculture Organization.

affected by pollution.

Aquatic pollution presents a serious threat to fish. FAO was actively involved in the UN Convention on the Prevention of Pollution of the Sea by Oil in 1954. A global monitoring system was recommended as a result of a December 1970 FAO Technical Conference on Marine Pollution and Its Effects on Living Resources and Fishing.

Also of concern is the contamination of food. Jointly with WHO, FAO has established a food standards program with the Economic Commission of Europe providing a group of experts. An FAO/WHO "Codex Alimentarius" Commission has been established.

Pesticide residues from which possible contamination of food may result are of particular interest to FAO. This represents one of FAO's dual problems: it encourages pesticide use but is also concerned with pesticide contamination. This concern has resulted in the publication of "Guidelines for the Drafting of Legislation for the Registration for the Marketing and Sale of Pesticides." In 1964, FAO developed a computerized system for use in optimizing the application of fertilizer and herbicides based upon soil properties so as to prevent pollution. FAO has studied water quality criteria for fish as related to pesticide pollution and pulp and paper mill effluent.

FAO is involved in preparing a world soil map. One potential use of this map is matching possible radioactive pollution with higher calcium content in the soil. FAO has assisted members in land-use planning particularly through its European Forestry and Agricultural Commissions.

Pollution abatement assistance is given to member nations by means of seminars. Emissions from forest burning have been a concern. The regional forestry commissions of FAO have rendered benefits through their publications and seminars and by providing the services of field experts.

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XV

INTERNATIONAL ATOMIC ENERGY AGENCY (IAEA)

Background and Structure

The International Atomic Energy Agency was established on 26 October 1956 in New York City. Eighty-one nations unanimously approved a statute creating the organization. Arrangements were made by a Preparatory Commission of 18 nations to bring it into operation. These arrangements were made at a Statute Conference meeting in New York and Vienna, respectively, in 1956 and 1957. There are 110 member nations. See Figure 38.

The Agency's purpose is to promote the use of atomic energy for peaceful uses. It has a General Conference, a Board of Governors, and a Secretariat headed by a Director-General. The General Conference is a meeting of all member nations taking place once a year and lasting about a week. They review the work of the IAEA and approve the annual budget. The Board of Governors consists of 25 government representatives and meets four times a year. The Board approves programs and decisions and submits the budget to the Conference. The Secretariat prepares the programs and budgets for approval. It carries out the approved programs. There are about 1,000 staff members of the Secretariat. Each year, about 40 different advisory groups meet to consider specific problems. See Figure 39 for more detail.

Strategies Used

From 1961 through 1971, IAEA published 27 technical documents concerning nuclear waste management; IAEA also considers ways to use nuclear techniques to benefit the environment. One way is to provide alternatives to chemical food preservatives. A number of nations have cleared several irradiated food products for human consumption.

The list of possible benefits to the environment goes on. Isotopes can be used for tracing underground water. Nuclear techniques may offer novel solutions to water treatment. Neutron activation is applicable to the measurement of the elemental composition of samples of air.

The IAEA addresses the problems of waste produced at nuclear establishments. Three philosophies for solution are: dilute and disperse, delay and decay, and concentrate and contain. Also, fast breeder reactors are seen as a panacea to the problem of depleting our uranium reserves.

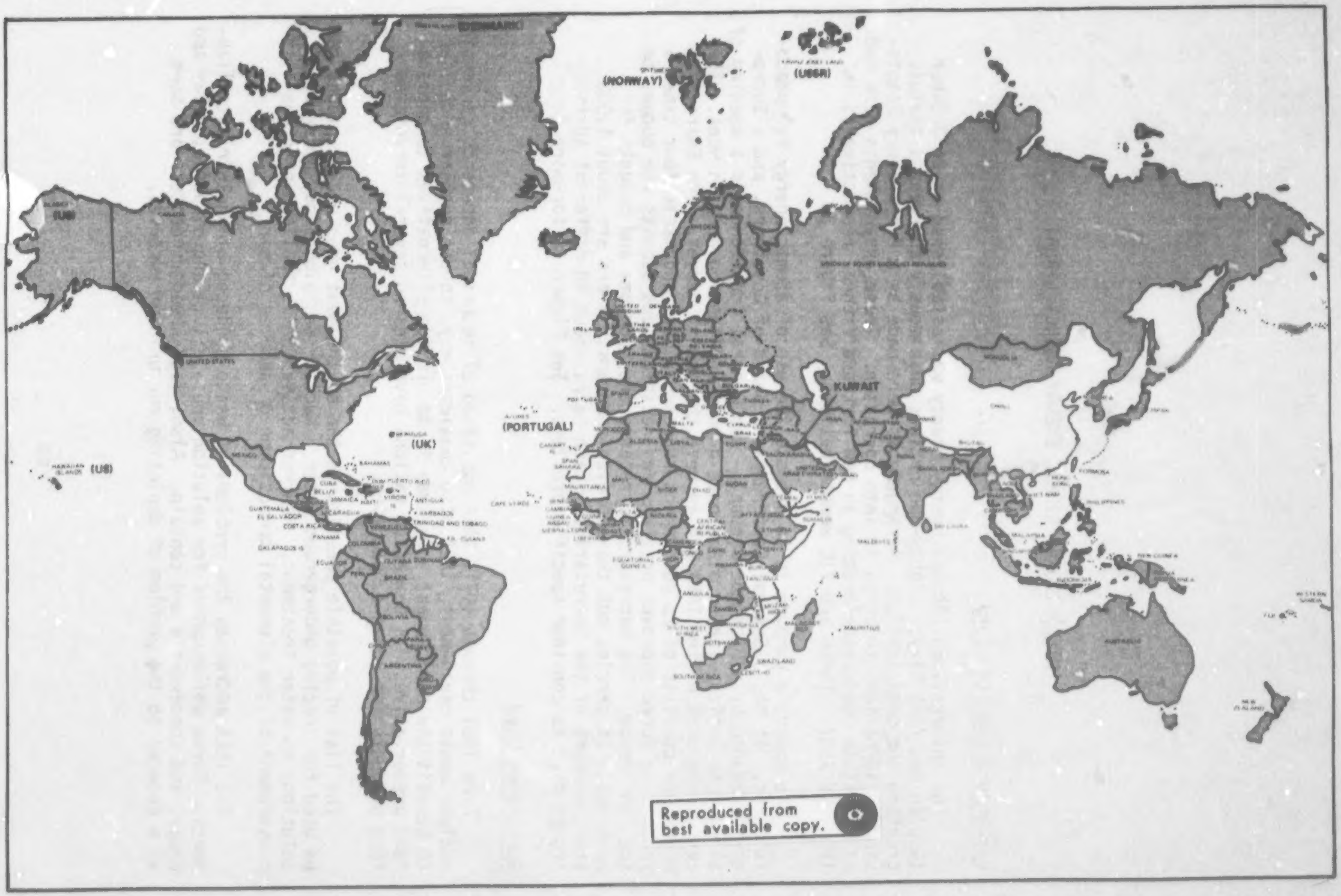

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Figure 38. The shaded portion shows the 110 member nations of the International Atomic Energy Agency as of January 1978.

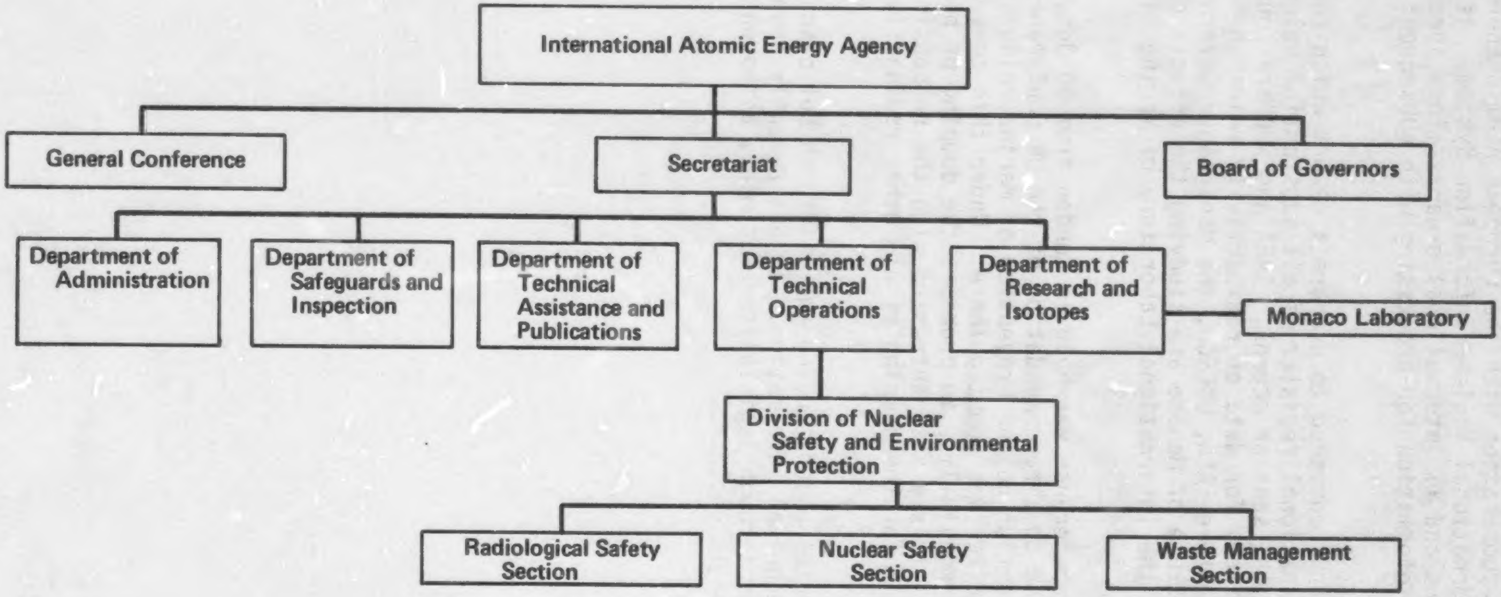
International Atomic Energy Agency
General Conference
Secretariat
Board of Governors
Department of Administration
Department of Safeguards and Inspection
Department of Technical Assistance and Publications
Department of Technical Operations
Department of Research and Isotopes
Monaco Laboratory
Division of Nuclear Safety and Environmental Protection
Radiological Safety Section
Nuclear Safety Section
Waste Management Section

Figure 39. Organization chart of the International Atomic Energy Agency.

In April 1970 IAEA in cooperation with the European Atomic Energy Community initiated an International Nuclear Information System. As of July 1971, 40 member nations and 11 international organizations agreed to prepare available nuclear information for processing with subsequent distribution to members by IAEA.

In November 1970, a panel convened to prepare a report which recommended the IAEA establish an international register of all substantial releases of radioactive wastes into the seas or oceans. IAEA and WHO are considering setting up a central depository for data on radioactivity released into the environment. In a joint venture IAEA, UNESCO, the Monegasque Government, and the Oceanographic Institute of Monaco are studying the effects of radioactivity on marine life at the International Laboratory of Marine Radioactivity.

An intergovernmental conference was held in London from 30 October to 13 November 1972 in response to a recommendation of the UN Conference on the Human Environment. A Convention on the Prevention of Marine Pollution by Dumping Wastes and Other Matter was adopted there. Under this convention, IAEA was entrusted with responsibility to prohibit the dumping of high-level radioactive matter at sea. It was also entrusted with the responsibility for requiring a prior permit for the dumping of all other radioactive matter at sea.

IAEA primarily cultivates understanding and attitudes but also renders benefits in the form of technical information. It has recently been given regulatory responsibilities through legislative enactment, although the strategy for implementation is unclear.

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XVI

UNITED NATIONS EDUCATIONAL, SCIENTIFIC, AND CULTURAL ORGANIZATION (UNESCO)

Background and Structure

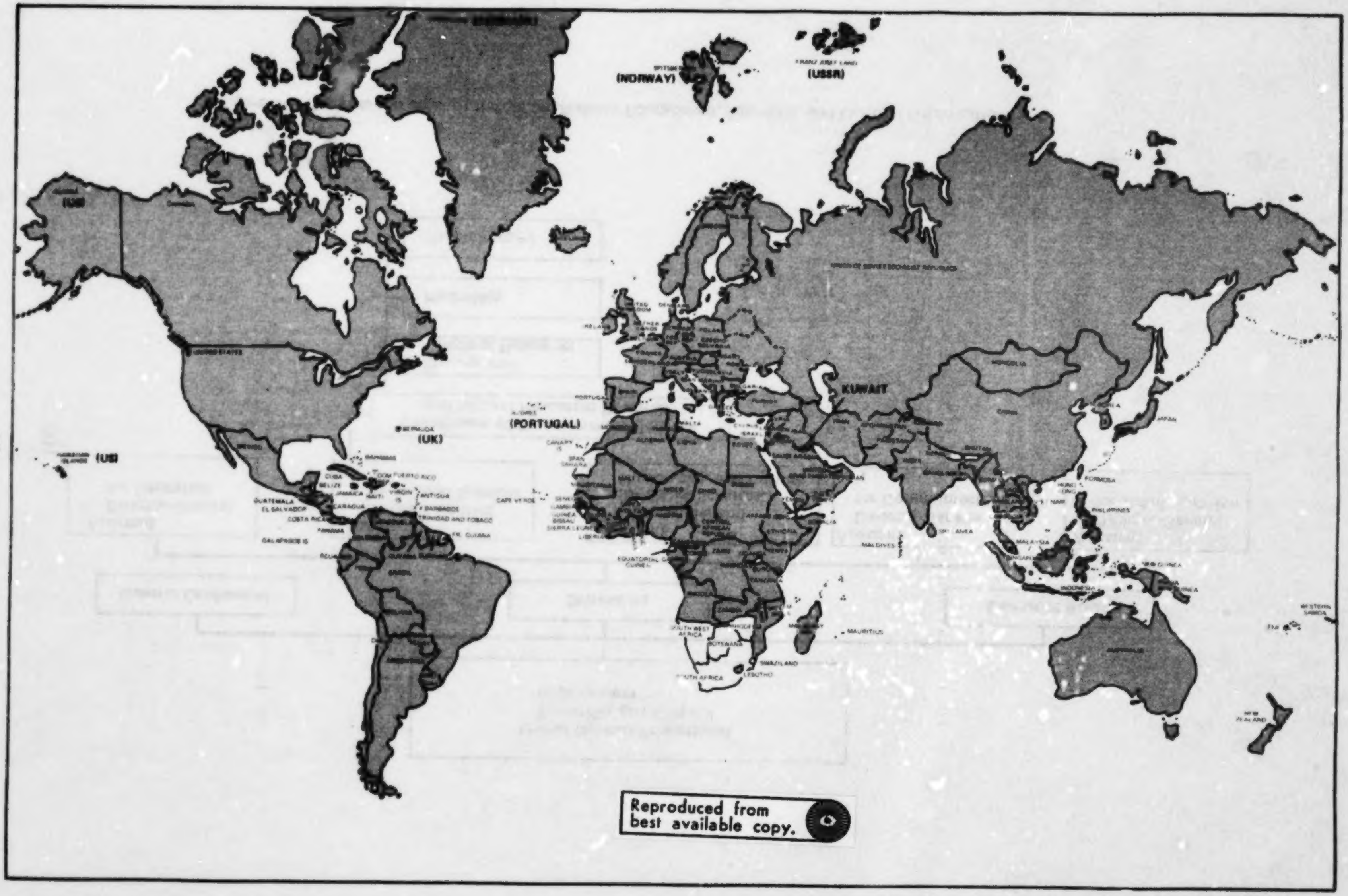
During 1 to 16 November 1945 representatives of 44 nations met in London to write the constitution for the UN Educational, Scientific, and Cultural Organization (UNESCO). Seven of the original 51 signatories of the UN Charter were not present: Ethiopia, Costa Rica, Honduras, Paraguay, the Soviet Union, Byelorussia, and the Ukraine. Venezuela came as an observer. The constitution was adopted on November 16. An agreement between UNESCO and the UN was approved by the General Assembly at its October-December 1946 session. This established UNESCO as a specialized agency of the UN. Current membership in UNESCO numbers 142. See Figure 40.

UNESCO promotes collaboration among nations; education, science, and culture are used to further respect for justice, law, and human rights. In the international arena, UNESCO is responsible for programs of primary, secondary, and higher education; fundamental adult education; teacher training; mass communications; and scientific research and training.

UNESCO consists of a General Conference, an Executive Board, and a Secretariat. Each member nation has up to five delegates representing it on the General Conference. Each member has one vote. The Executive Board consists of 24 members elected by the General Conference. The Board prepares the agenda for the General Conference. The Secretariat consists of a Director-General and a staff. The Director-General is nominated by the Executive Board and appointed by the General Conference for a 6-year term. See Figure 41 for more detail.

Each member is required to arrange the establishment of a national commission or cooperating body. These bodies provide a liaison between UNESCO and the scientific, educational, and cultural life of the respective nation. This requirement is unique for it requires the development of an organization within the member nations. UNESCO has sanctioned and taken action to protect cultural monuments.

In 1960, the International Oceanographic Commission (IOC) was established as a semiautonomous subsidiary of UNESCO. IOC has 74 member nations and promotes "scientific investigation with a view to learning more about the nature and resources of the oceans through the concerted actions of its members." See Figure 42.



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best available copy.

Figure 40. The shaded portion shows the 142 member nations of the United Nations Educational, Scientific, and Cultural Organization as of January 1978.

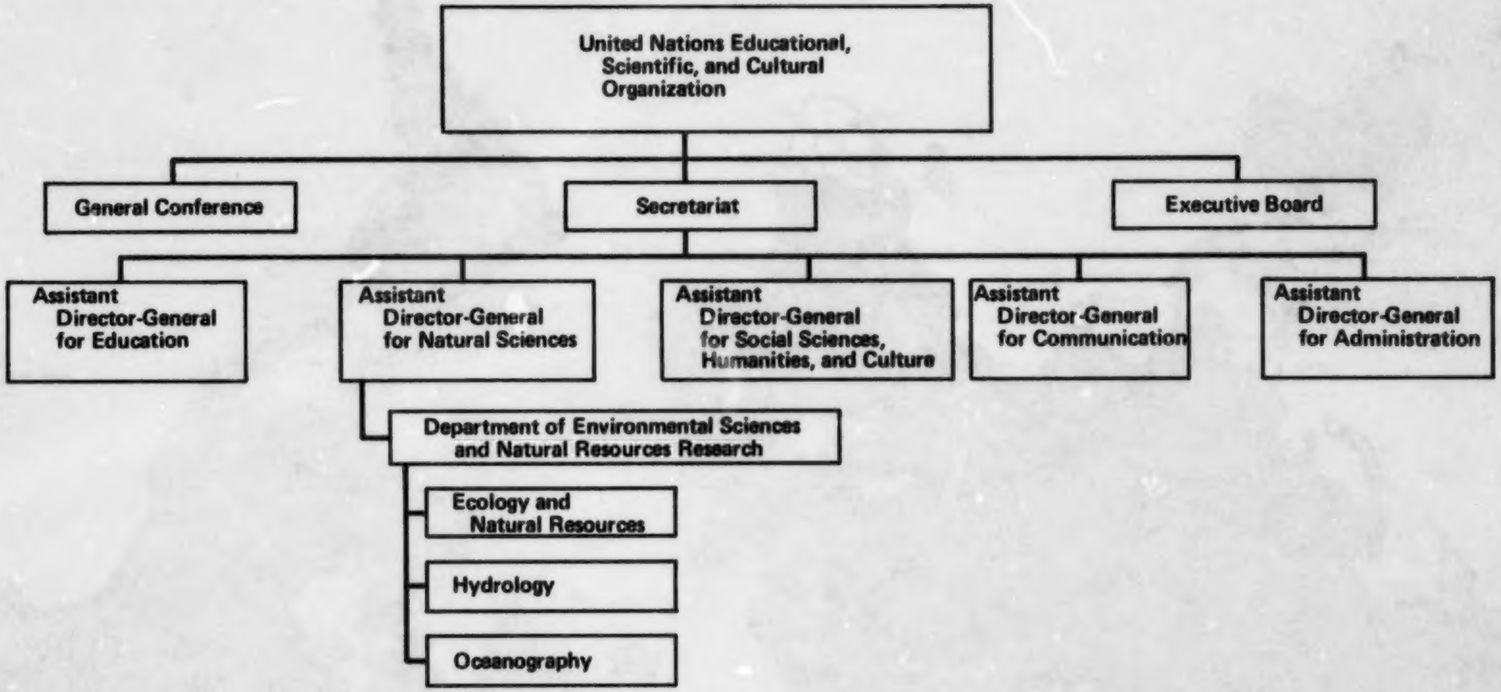
United Nations Educational, Scientific, and Cultural Organization
General Conference
Secretariat
Executive Board
Assistant Director-General for Education
Assistant Director-General for Natural Sciences
Assistant Director-General for Social Sciences, Humanities, and Culture
Assistant Director-General for Communication
Assistant Director-General for Administration
Department of Environmental Sciences and Natural Resources Research
Ecology and Natural Resources
Hydrology
Oceanography

Figure 41. Organization chart of the United Nations Educational, Scientific, and Cultural Organization.

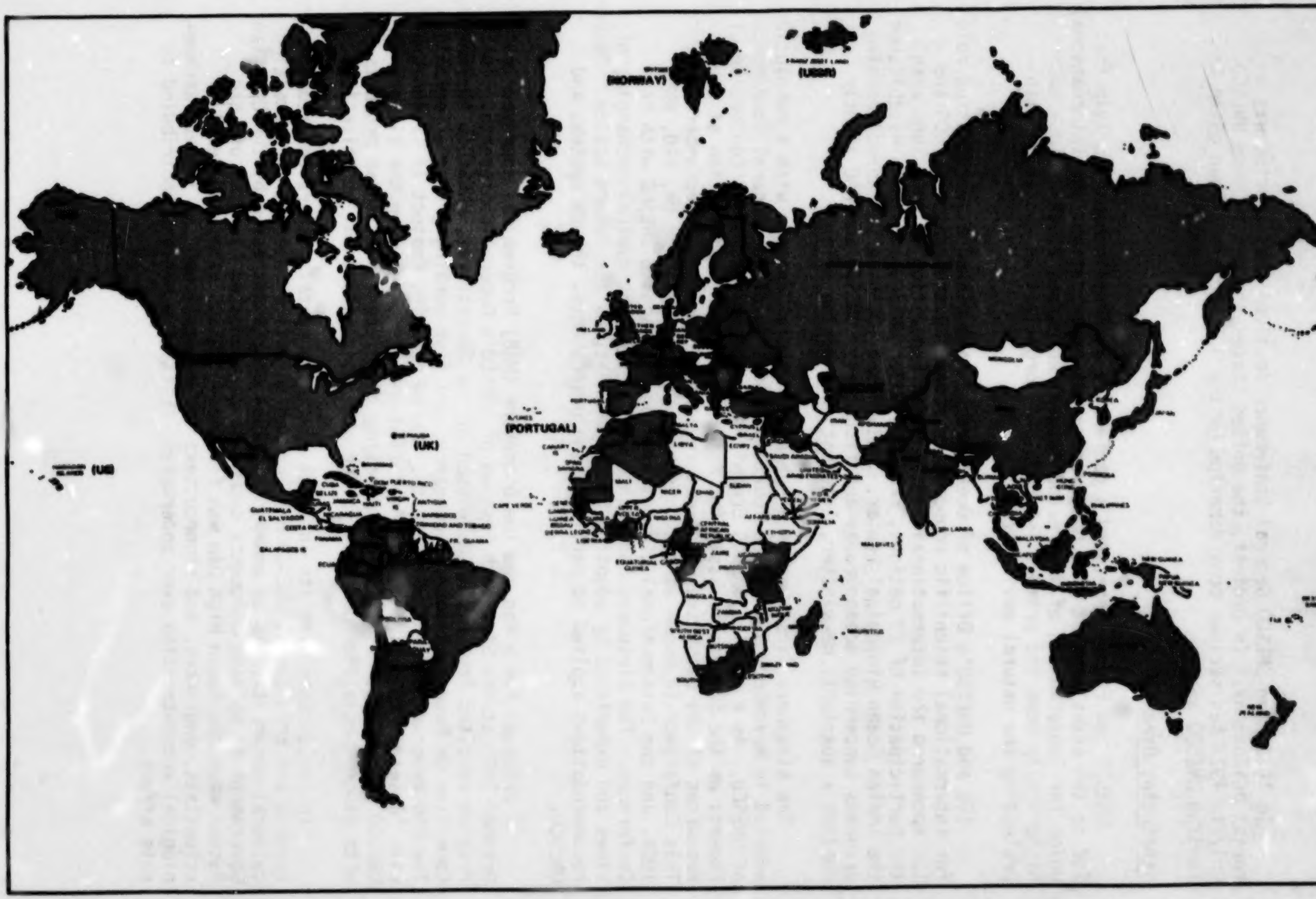

Figure 42. The shaded portion shows the 74 member nations of the Intergovernmental Oceanographic Commission as of January 1973.

In 1975, the UNESCO General Conference resolved that Zionism was a racist philosophy. In protest, the United States stopped funding UNESCO. Only in 1977 has serious consideration by the U.S. Congress been given to funding UNESCO again.

Strategies Used

UNESCO and France sponsored a conference at Fontainebleau in 1948 that led to the establishment of a nongovernmental organization, the International Union for Conservation of Nature and Natural Resources (IUCN). IUCN has historically been the primary international organization concerned with protecting the natural environment.

IOC and UNESCO's Office of Oceanography have played a coordinating role for international scientific cooperation regarding the seas. UNESCO and IOC sponsored the International Indian Ocean Expedition of 1959-1966 with the participation of 23 nations, FAO, and WHO. UNESCO and India established the Indian Ocean Biological Center. UNESCO and IOC have sponsored training programs concerning oceanography and fisheries. UNESCO and FAO jointly publish a quarterly newsletter, International Marine Science.

The biosphere first became a subject of social concern with a resolution adopted in November 1966 at the Fourteenth Session of the General Conference of UNESCO. As a result, UNESCO organized an Intergovernmental Conference of Experts on the Scientific Basis for Rational Use and Conservation of the Resources of the Biosphere which met in Paris from 4 to 13 September 1968. This Conference is known as the Biosphere Conference. The UN, FAO, WHO, IUCN, and the International Biological Program assisted UNESCO with this Conference. The Biosphere Conference went beyond the typical exchanging of views and experience by adopting 20 recommendations for future action. These recommendations applied to participating governments, the UN system, and UNESCO.

A proposal for a Man and the Biosphere (MAB) Program was approved in October 1970 at the Sixteenth Session of UNESCO's General Conference. This Program resulted from a plan developed by the Secretariat, UNESCO's Advisory Committee on Natural Resources Research, and five working groups of experts. The MAB Program contains 23 projects. As an example, Project 14 is concerned with "Research on Environmental Pollution and Its Effects on the Biosphere." UNESCO acts as a catalyst in coordinating the execution of these projects with other specialized UN agencies and with nongovernmental organizations.

In conjunction with its interest in environmental matters related to forests and arid zones, UNESCO has pursued an active interest in protecting cultural monuments. As an example, in 1964 UNESCO was asked by the Egyptian Government to salvage monuments doomed to be inundated by water of Lake Nasser when the Aswan High Dam was finished. UNESCO assembled teams of scientists, engineers, and stonecutters and accomplished the largest archaeological reconstruction ever undertaken. Fifty-two nations contributed to this effort.

The primary strategy used by UNESCO is to cultivate understanding and attitudes through conferences, publications, and cooperative studies.

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XVII

INTERNATIONAL LABOR ORGANIZATION (ILO)

Background and Structure

The International Labor Organization (ILO) was founded in 1919 and signed an agreement with the UN on 30 May 1946 to be a specialized agency of the UN. There are 134 members of the ILO. See Figure 43.

ILO has a Governing Body composed of government, employer, and worker members; a General Conference of representatives of the member nations; and an International Labor Office controlled by the Governing Body. The Director-General of the International Labor Office is appointed by the Governing Body. The Conference considers and concludes international conventions and resolutions. The Governing Body makes decisions regarding these resolutions leading to actions by the Director-General. See Figure 44.

Strategies Used

ILO got involved in exposures of workers to pollution at the Sixth Meeting of the Joint ILO-WHO Committee on Occupational Health in 1969. The purpose of this meeting was to review standards of exposure to airborne substances.

The Fifty-Fourth Session of the International Labor Conference adopted a resolution in June 1970 concerning ILO participation in the Stockholm Conference. The importance of the working environment was to be stressed within the total environmental context.

The Fifty-Seventh Session of the International Labor Conference adopted a resolution in 1972 that ILO was to work at improving the environment of workers.

The 189th Session of the ILO Governing Body decided during February and March 1973 to convene a Meeting of Experts on Control of Atmosphere Pollution in the Working Environment. There were three Meetings of Experts held during 1973 and 1974 to prepare recommendations for an international instrument on the subject. The first meeting in November 1973 addressed possible international regulations on the safe use of asbestos.

The 191st Session of the ILO Governing Body decided in November 1973, to place the working environment on the agenda for the Sixty-First Session

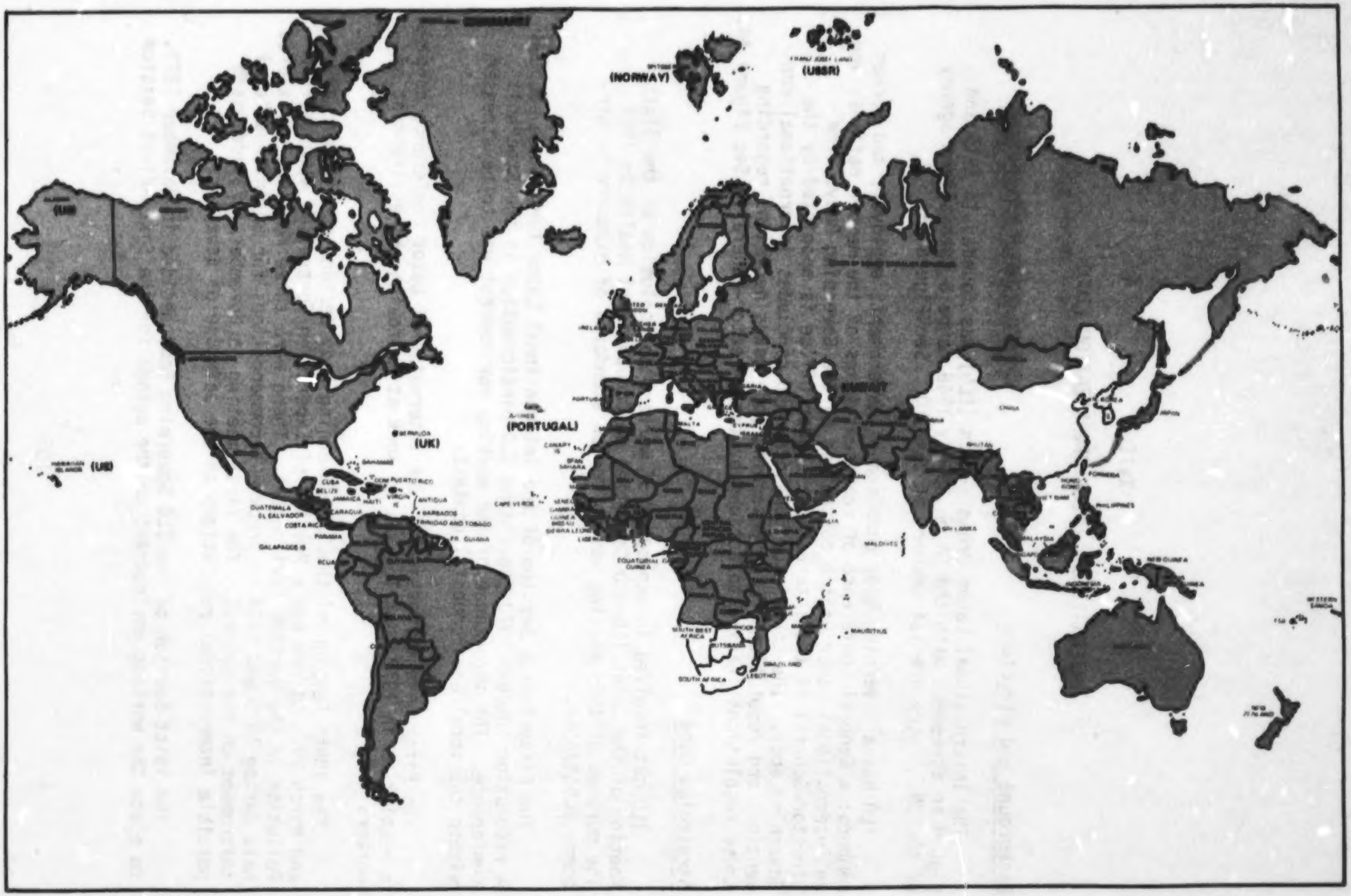

Figure 43. The shaded portion shows the 134 member nations of the International Labor Organization as of January 1978.

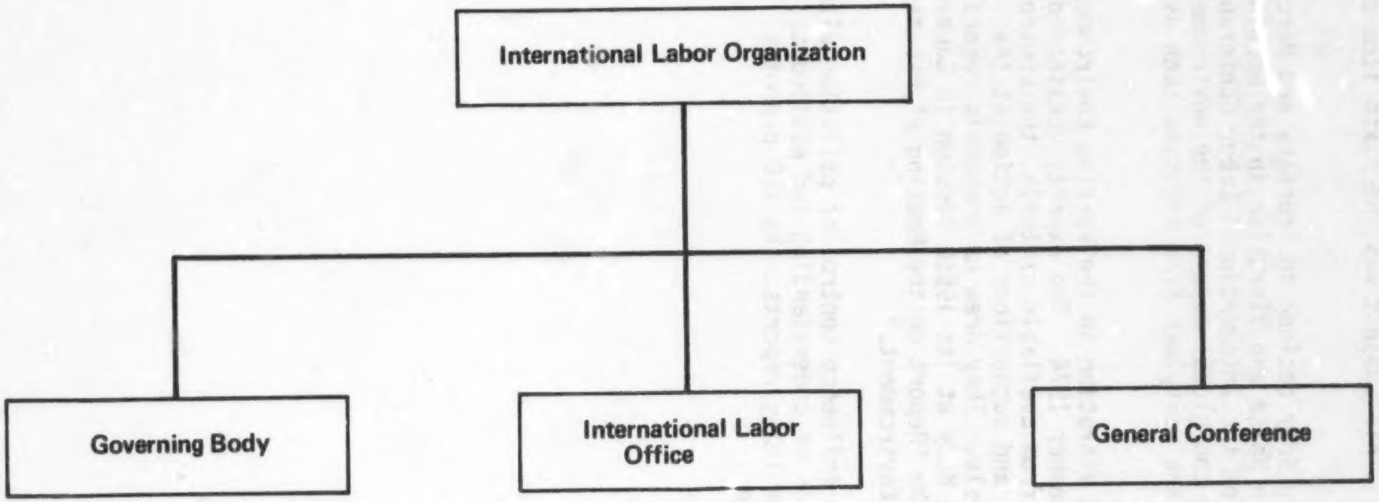

Figure 44. Organization chart of the International Labor Organization.

of the International Labor Conference. There were two aspects: (1) air pollution and (2) noise and vibration. This subject was the sixth item on the agenda.

The 192nd Session of the Governing Body decided in February and March 1974 to convene a Meeting of Experts on Noise and Vibration in the Working Environment. The Fifty-Ninth Session of the International Labor Conference adopted a resolution in 1974 stressing the global aspect of the environment and the need to protect the worker in the workplace from stresses such as air pollution and noise.

A Meeting of Experts on Noise and Vibration in the Working Environment took place in Turin, Italy 2 to 10 December 1974. The experts considered the development of exposure standards from available criteria, the control and prevention of noise and vibration, and suggestions of action at the plant, national, and international levels. They drew up proposals regarding a code of practice. The ILO Governing Body at its 195th Session in Geneva, from 4 to 7 March 1976, took note of the "Report on the Meeting of Experts on Noise and Vibration in the Working Environment."

ILO uses legislative enactment to influence control of pollution with the use of another strategy, cultivation of understanding and attitudes. Through meetings of experts and the resulting reports, the ILO promotes awareness of problems on a global scale.

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XVIII

LAW OF THE SEA CONFERENCE

Background and Structure

The UN General Assembly convened two Law of the Sea Conferences, one in 1958 and the other in 1960, following 10 years of preparation by the UN International Law Commission. The first Conference dealt with territorial seas, contiguous coastal zones, the high seas, fishing and conservation of living resources, and the continental shelf. The second Conference dealt with the breadth of the territorial sea and fishing limits. Only the first Conference produced legal instruments.

Since then, an awareness of pollution of the seas has developed. Along with this trend, there have been steady increases in fish catches, oil production, and mineral explorations.

Strategies Used

To address some of the problems resulting from these trends the UN General Assembly resolved to convene the Third UN Conference on the Law of the Sea on 17 December 1970. The following organizations were invited to assist in preparing for the conference: UNESCO and its International Oceanographic Commission, FAO and its Committee on Fisheries, WHO, IMCO, WMO, and IAEA.

The Third Conference opened in New York on 3 December 1973. The Conference had the mandate to produce a single comprehensive convention through consensus. All efforts at consensus were exhausted prior to voting, and there were cooling-off periods between sessions prior to any voting.

A substantive session of the Conference followed in Caracas, Venezuela from 20 to 29 June 1974. Three committees were established; one worked on a marine pollution and scientific research draft which was originally prepared by a UN Sea-Bed Committee in 1968. A second substantive session began in Geneva on 17 March 1975 at which a complete negotiating text was formulated.

A major issue in the text was defining the territorial sea. Another issue was the protection and preservation of the marine environment. The text provided a definition of "pollution of the marine environment" that placed the obligation of protection from pollution on the nations: they would be responsible for their territory, including vessels and aircraft registered with the respective nations. Offshore terminals would also come under the nation's jurisdiction. Disputes would be settled by a proposed International Sea-Bed Authority.

The Conference opened its Fourth Session in New York on 15 March 1976. A revised four-part text, prepared by the chairpersons of the three Committees, was presented to the Conference as a basis for negotiation. The third part of this revised text concerned the environment, research, and technology. It recommended that nations would have varying powers to enforce anti-pollution regulations; these regulations would depend on which sea areas were involved and whether the nation was the country of registry, a coastal nation, or a port nation. The proposed sea areas were a 19-kilometer territorial sea, a contiguous zone extending up to 39 kilometers from shore, a 320-kilometer economic zone, the continental shelf underlying these areas, archipelagic waters, and the high seas. An economic zone would give national rights to the resources located therein, but navigational rights would be given to all nations. The next session of the Conference was held in New York from 2 August to 17 September 1976.

A sequence of strategies was used by the UN. First, the General Assembly passed a resolution to establish a conference which was to draw up a convention; thus legislative enactment led to cultivation of understanding and attitudes. The next step was to lead to adoption of the convention as a statute by the General Assembly, thus, legislative enactment. This action would lead to two other strategies, adjudication for the high seas and territorial jurisdiction for the other categories of the seas.

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APPENDIX A.
ABBREVIATIONS USED IN THIS SURVEY

CCMS - Committee on the Challenges of Modern Society
CE - Council of Europe
CMEA - Council for Mutual Economic Assistance
COMECON - Council for Mutual Economic Assistance
EC - European Communities
ECA - Economic Commission for Africa
ECE - Economic Commission for Europe
ECLA - Economic Commission for Latin America
ECOSOC - United Nations Economic and Social Council
ECSC - European Coal and Steel Community
ECWA - Economic Commission for Western Asia
EPA - United States Environmental Protection Agency
ESCAP - Economic and Social Commission for Asia and the Pacific
FAO - Food and Agriculture Organization
GEMS - Global Environmental Monitoring System
GESAMP - Group of Experts on the Scientific Aspects of Marine Pollution
IAEA - International Atomic Energy Agency
ICAO - International Civil Aviation Organization
ICSU - International Council of Scientific Unions
IDA - International Development Association
IFC - International Finance Corporation
IGOSS - Integrated Global Ocean Station System
ILO - International Labor Organization
IMCO - Intergovernmental Maritime Consultative Organization
IOC - International Oceanographic Commission
IOS - International Organization for Standardization
IRS - International Referral Service
IUCN - International Union for Conservation of Nature and Natural Resources
MAB - Man and the Biosphere Program
NATO - North Atlantic Treaty Organization
NGO - Nongovernmental Organization
OAS - Organization of American States
OECD - Organization for Economic Cooperation and Development
OEEC - Organization for European Economic Cooperation
PAHO - Pan American Health Organization
PCB - Polychlorinated Biphenols
SCOPE - Scientific Committee on Problems of the Environment
UN - United Nations
UNEP - United Nations Environment Program
UNESCO - United Nations Educational, Scientific, and Cultural Organization
UNRC - United Nations Regional Commissions
WB - World Bank Group
WHO - World Health Organization
WMO - World Meteorological Organization
WWW - World Weather Watch

APPENDIX B. MEMBERS OF THE INTERNATIONAL ORGANIZATIONS ADDRESSED IN THIS SURVEY

										UN REGIONAL COMMISSIONS 3/				WORLD BANK GROUP									
	OECD	CMEA	Group of 77 1/	NATO	EC	CE	OAS	UN	IAEA	UNEP 2/	ECE	ESCAP	ECLA	ECA	World Bank	IFC	IDA	IMCO	WHO	WMO	FAO	UNESCO	ILO	ICAO
Afghanistan			x					x	x			x			x	x	x		x	x	x	x	x	x
Albania		x						x	x		x								x	x	x	x		
Algeria			x					x	x					x	x		x	x	x	x	x	x	x	x
Angola								x										x	x	x	x	x	x	x
Argentina			x				x	x	x	x			x		x	x	x	x	x	x	x	x	x	x
Australia	x							x	x	x		x			x	x	x	x	x	x	x	x	x	x
Austria	x					x		x	x	x	x				x	x	x	x	x	x	x	x	x	x
Bahamas			x					x							x			x	x	x	x		x	x
Bahrain			x					x							x			x	x		x	x	x	x
Bangladesh			x					x	x			x			x	x	x	x	x	x	x	x	x	x
Barbados			x				x	x					x		x			x	x	x	x	x	x	x
Belgium	x			x	x	x		x	x		x				x	x	x	x	x	x	x	x	x	x
Benin			x					x						x	x		x		x	x	x	x	x	x

1/ The Palestine Liberation Organization is also a member
2/ 1973 Governing Council holding 3-year terms; one-third is elected by the UN General Assembly each year
3/ As of 1973

											UN REGIONAL COMMISSIONS				WORLD BANK GROUP									
	OECD	CMEA	Group of 77	NATO	EC	CE	OAS	UN	IAEA	UNEP	ECE	ESCAP	ECLA	ECA	World Bank	IFC	IDA	IMCO	WHO	WMO	FAO	UNESCO	ILO	ICAO
Bhutan			x					x				x												
Bolivia			x				x	x	x				x		x	x	x		x	x	x	x	x	x
Botswana			x					x						x	x		x		x	x	x			
Brazil			x				x	x	x	x			x		x	x	x	x	x	x	x	x	x	x
Bulgaria		x						x	x		x							x	x	x	x	x	x	x
Burma			x					x	x			x			x	x	x	x	x	x	x	x	x	x
Burundi			x					x		x				x	x		x		x	x	x	x	x	x
Byelorussia 4/								x	x		x								x	x		x	x	
Cambodia			x					x	x			x			x		x	x	x	x	x	x	x	x
Cameroon			x					x	x	x				x	x	x	x	x	x	x	x	x	x	x
Canada	x			x				x	x	x	x		x		x	x	x	x	x	x	x	x	x	x
Cape Verde			x					x							x			x	x	x	x			x
Central African Empire			x					x		x				x	x		x		x	x	x	x	x	x
Chad			x					x						x	x		x		x	x	x	x	x	x

4/ A republic within the Soviet Union

											UN REGIONAL COMMISSIONS				WORLD BANK GROUP									
	OECD	CMEA	Group of 77	NATO	EC	CE	OAS	UN	IAEA	UNEP	ECE	ESCAP	ECLA	ECA	World Bank	IFC	IDA	IMCO	WHO	WMO	FAO	UNESCO	ILO	ICAO
Chile			x				x	x	x	x			x		x	x	x	x	x	x	x	x	x	x
China								x		x		x						x	x	x	x	x		x
Colombia			x				x	x	x				x		x	x	x	x	x	x	x	x	x	x
Comoros			x					x							x				x	x	x	x		
Congo			x					x						x	x		x	x	x	x	x	x	x	x
Costa Rica			x				x	x	x				x		x	x	x		x	x	x	x	x	x
Cuba		x	x				x	x	x				x					x	x	x	x	x	x	x
Cyprus			x			x		x	x		x				x	x	x	x	x	x	x	x	x	x
Czechoslovakia		x						x	x	x	x							x	x	x	x	x	x	x
Democratic Yemen			x					x							x		x		x	x	x	x	x	x
Denmark	x			x	x	x		x	x		x				x		x	x	x	x	x	x	x	x
Djibouti								x													x			
Dominican Republic			x				x	x	x				x		x	x	x	x	x	x	x	x	x	x
Ecuador			x				x	x	x				x		x	x	x	x	x	x	x	x	x	x

	OECD	CMEA	Group of 77	NATO	EC	CE	OAS	UN	IAEA	UNEP	UN REGIONAL COMMISSIONS				WORLD BANK GROUP			IMCO	WHO	WMO	FAO	UNESCO	ILO	ICAO
											ECE	ESCAP	ECLA	ECA	World Bank	IFC	IDA							
Egypt			x					x	x					x	x	x	x	x	x	x	x	x	x	x
El Salvador			x				x	x	x				x		x	x	x		x	x	x	x	x	x
Equatorial Guinea			x					x						x	x		x	x						x
Ethiopia			x					x	x					x	x	x	x	x	x	x	x	x	x	x
Fiji			x					x							x		x		x		x		x	x
Finland	x	x						x	x		x				x	x	x	x	x	x	x	x	x	x
France	x			x	x	x		x	x	x	x	x	x		x	x	x	x	x	x	x	x	x	x
Gabon			x					x	x	x				x	x	x	x	x	x	x	x	x	x	x
Gambia			x					x						x	x		x		x		x	x		x
Germany, East		x						x	x	x	x							x	x	x		x	x	
Germany, West	x			x	x	x		x	x	x	x				x	x	x	x	x	x	x	x	x	x
Ghana			x					x	x	x				x	x	x	x	x	x	x	x	x	x	x
Greece	x			x		x		x	x		x				x	x	x	x	x	x	x	x	x	x
Grenada			x					x							x	x	x		x		x	x		

										UN REGIONAL COMMISSIONS				WORLD BANK GROUP									
	OECD	CMEA	Group of 77	NATO	EC	CE	OAS	UN	IAEA	UNEP	ECE	ESCAP	ECLA	ECA	World Bank	IFC	IDA	IMCO	WHO	WMO	FAO	UNESCO	ILO	ICAO
Guatemala			x				x	x	x	x			x		x	x	x		x	x	x	x	x	x
Guinea			x					x						x	x		x	x	x	x	x	x	x	x
Guinea-Bissau			x					x							x	x	x	x	x	x	x	x	x	x
Guyana			x					x					x		x	x	x		x	x	x	x	x	x
Haiti			x				x	x	x				x		x	x	x	x	x	x	x	x	x	x
Holy See									x															
Honduras			x				x	x					x		x	x	x	x	x	x	x	x	x	x
Hungary		x						x	x		x							x	x	x	x	x	x	x
Iceland	x			x		x		x	x	x	x				x	x	x	x	x	x	x	x	x	x
India			x					x	x	x		x			x	x	x	x	x	x	x	x	x	x
Indonesia			x					x	x	x		x			x	x	x	x	x	x	x	x	x	x
Iran			x					x	x	x		x			x	x	x	x	x	x	x	x	x	x
Iraq			x					x	x	x					x	x	x	x	x	x	x	x	x	x
Ireland	x				x	x		x	x		x				x	x	x	x	x	x	x	x	x	x

											UN REGIONAL COMMISSIONS				WORLD BANK GROUP									
	OECD	CMEA	Group of 77	NATO	EC	CE	OAS	UN	IAEA	UNEP	ECE	ESCAP	ECLA	ECA	World Bank	IFC	IDA	IMCO	WHO	WMO	FAO	UNESCO	ILO	ICAO
Israel								x	x						x	x	x	x	x	x	x	x	x	x
Italy	x			x	x	x		x	x	x	x				x	x	x	x	x	x	x	x	x	x
Ivory Coast			x					x	x					x	x	x	x	x	x	x	x	x	x	x
Jamaica			x				x	x	x	x			x		x	x		x	x	x	x	x	x	x
Japan	x							x	x	x	x				x	x	x	x	x	x	x	x	x	x
Jordan			x					x	x	x					x	x	x	x	x	x	x	x	x	x
Kenya			x					x	x	x				x	x	x	x	x	x	x	x	x	x	x
Korea, North									x										x	x	x	x		x
Korea, South			x						x			x			x	x	x	x	x	x	x	x		x
Kuwait			x					x	x	x					x	x	x	x	x	x	x	x	x	x
Laos			x					x				x			x		x		x	x	x	x	x	x
Lebanon			x					x	x	x					x	x	x	x	x	x	x	x	x	x
Lesotho			x					x						x	x	x	x		x		x	x		x
Liberia			x					x	x					x	x	x	x	x	x	x	x	x	x	x

											UN REGIONAL COMMISSIONS				WORLD BANK GROUP									
	OECD	CMEA	Group of 77	NATO	EC	CE	OAS	UN	IAEA	UNEP	ECE	ESCAP	ECLA	ECA	World Bank	IFC	IDA	IMCO	WHO	WMO	FAO	UNESCO	ILO	ICAO
Libyan Arab Jamahiriya			x					x	x					x	x	x	x	x	x	x	x	x	x	x
Liechtenstein									x															
Luxembourg	x			x	x	x		x	x		x				x	x	x		x	x	x	x	x	x
Madagascar			x					x	x	x				x	x	x	x	x	x	x	x	x	x	x
Malawi			x					x		x				x	x	x	x		x	x	x	x	x	x
Malaysia			x					x	x			x			x	x	x	x	x	x	x	x	x	x
Maldives			x					x							x		x	x	x		x			x
Mali			x					x	x					x	x		x		x	x	x	x	x	x
Malta			x			x		x			x							x	x	x	x	x	x	x
Mauritania			x					x						x	x	x	x	x	x	x	x	x	x	x
Mauritius			x					x	x					x	x	x	x		x	x	x	x	x	x
Mexico			x				x	x	x	x			x		x	x	x	x	x	x	x	x	x	x
Monaco									x										x			x		
Mongolia		x						x	x			x							x	x	x	x	x	

											UN REGIONAL COMMISSIONS				WORLD BANK GROUP									
	OECD	CMEA	Group of 77	NATO	EC	CE	OAS	UN	IAEA	UNEP	ECE	ESCAP	ECLA	ECA	World Bank	IFC	IDA	IMCO	WHO	WMO	FAO	UNESCO	ILO	ICAO
Morocco			x					x	x	x				x	x	x	x	x	x	x	x	x	x	x
Mozambique			x					x											x	x	x	x	x	x
Namibia																					x			
Nauru												x												x
Nepal			x					x				x			x	x	x		x	x	x	x	x	x
Netherlands	x			x	x	x		x	x	x	x	x	x		x	x	x	x	x	x	x	x	x	x
New Zealand	x							x	x			x			x	x	x	x	x	x	x	x	x	x
Nicaragua			x				x	x	x	x			x		x	x	x		x	x	x	x	x	x
Niger			x					x	x					x	x		x		x	x	x	x	x	x
Nigeria			x					x	x	x				x	x	x	x	x	x	x	x	x	x	x
Norway	x			x		x		x	x		x				x	x	x	x	x	x	x	x	x	x
Oman			x					x							x	x	x	x	x	x	x	x		x
Pakistan			x					x	x	x		x			x	x	x	x	x	x	x	x	x	x
Panama			x				x	x	x	x			x		x	x	x	x	x	x	x	x	x	x

											UN REGIONAL COMMISSIONS				WORLD BANK GROUP									
	OECD	CMEA	Group of 77	NATO	EC	CE	OAS	UN	IAEA	UNEP	ECE	ESCAP	ECLA	ECA	World Bank	IFC	IDA	IMCO	WHO	WMO	FAO	UNESCO	ILO	ICAO
Papua New Guinea			x					x							x	x	x	x	x	x	x	x	x	x
Paraguay			x				x	x	x				x		x	x	x		x	x	x	x	x	x
Peru			x				x	x	x	x			x		x	x	x	x	x	x	x	x	x	x
Philippines			x					x	x	x		x			x	x	x	x	x	x	x	x	x	x
Poland		x						x	x	x	x							x	x	x	x	x	x	x
Portugal	x			x				x	x		x				x	x		x	x	x	x	x	x	x
Qatar			x					x	x						x			x	x	x	x	x	x	x
Romania		x	x					x	x	x	x				x			x	x	x	x	x	x	x
Rwanda			x					x						x	x	x	x		x	x	x	x	x	x
Samoa								x				x			x	x	x		x					
San Marino																						x		
Sao Tome and Principe			x					x							x		x		x	x	x			x
Saudi Arabia			x					x	x						x	x	x	x	x	x	x	x	x	x
Senegal			x					x	x	x				x	x	x	x	x	x	x	x	x	x	x

											UN REGIONAL COMMISSIONS				WORLD BANK GROUP									
	OECD	CMEA	Group of 77	NATO	EC	CE	OAS	UN	IAEA	UNEP	ECE	ESCAP	ECLA	ECA	World Bank	IFC	IDA	IMCO	WHO	WMO	FAO	UNESCO	ILO	ICAO
Seychelles								x												x	x	x	x	x
Sierra Leone			x					x	x	x				x	x	x	x	x	x	x	x	x	x	x
Singapore			x					x	x			x			x	x		x	x	x		x	x	x
Somalia			x					x		x				x	x	x	x		x	x	x	x	x	x
South Africa								x	x					x	x	x	x		x	x				x
Soviet Union		x						x	x	x	x	x						x	x	x		x	x	x
Spain	x							x	x	x	x				x	x	x	x	x	x	x	x	x	x
Sri Lanka			x					x	x	x		x			x	x	x	x	x	x	x	x	x	x
Sudan			x					x	x	x				x	x	x	x	x	x	x	x	x	x	x
Surinam			x					x										x	x	x	x	x	x	x
Swaziland			x					x						x	x	x	x		x		x		x	x
Sweden	x					x		x	x	x	x				x	x	x	x	x	x	x	x	x	x
Switzerland	x					x			x		x							x	x	x	x	x	x	x
Syria			x					x	x	x					x	x	x	x	x	x	x	x	x	x

											UN REGIONAL COMMISSIONS				WORLD BANK GROUP									
	OECD	CMEA	Group of 77	NATO	EC	CE	OAS	UN	IAEA	UNEP	ECE	ESCAP	ECLA	ECA	World Bank	IFC	IDA	IMCO	WHO	WMO	FAO	UNESCO	ILO	ICAO
Tanzania			x					x	x	x				x	x	x	x	x	x	x	x	x	x	x
Thailand			x					x	x			x			x	x	x	x	x	x	x	x	x	x
Togo			x					x						x	x	x	x		x	x	x	x	x	x
Tonga												x							x					
Trinidad and Tobago			x				x	x					x		x	x	x	x	x	x	x	x	x	x
Tunisia			x					x	x	x				x	x	x	x	x	x	x	x	x	x	x
Turkey	x			x		x		x	x	x	x				x	x	x	x	x	x	x	x	x	x
Uganda			x					x	x					x	x	x	x		x	x	x	x	x	x
Ukraine 4/								x	x		x								x	x		x	x	
United Arab Emirates			x					x	x						x				x		x	x	x	x
United Kingdom	x			x	x	x		x	x	x	x	x	x		x	x	x	x	x	x	x	x	x	x
United States	x			x			x	x	x	x	x	x	x		x	x	x	x	x	x	x	x		x
Upper Volta			x					x						x	x	x	x		x	x	x	x	x	x
Uruguay			x				x	x	x				x		x	x		x	x	x	x	x	x	x

4/ A republic within the Soviet Union

	OECD	CMEA	Group of 77	NATO	EC	CE	OAS	UN	IAEA	UNEP	UN REGIONAL COMMISSIONS				WORLD BANK GROUP			IMCO	WHO	WMO	FAO	UNESCO	ILO	ICAO
											ECE	ESCAP	ECLA	ECA	World Bank	IFC	IDA							
Venezuela			x				x	x	x	x			x		x	x		x	x	x	x	x	x	x
Viet Nam			x					x	x			x			x	x	x		x	x	x	x	x	x
Yemen Arab Republic			x					x							x	x	x		x	x	x	x	x	x
Yugoslavia	x	x	x					x	x	x	x				x	x	x	x	x	x	x	x	x	x
Zaire			x					x	x					x	x	x	x	x	x	x	x	x	x	x
Zambia			x					x	x					x	x	x	x		x	x	x	x	x	x

APPENDIX C.
LOCATION OF HEADQUARTERS OF INTERNATIONAL ORGANIZATIONS ADDRESSED IN THIS SURVEY

Organization 1/	Location
UN	New York City, New York
OECD	Paris, France
NATO/CCMS	Brussels, Belgium
European Communities	Brussels, Belgium
Council of Europe	Strasbourg, France
CMEA	Moscow, Russia
OAS	Washington, D.C.
ECOSOC	New York City, New York
Regional Commissions	
ECE	Geneva, Switzerland
ESCAP	Bangkok, Thailand
ECLA	Caracas, Venezuela
ECA	Addis Ababa, Ethiopia
ECWA	Beirut, Lebanon
IMCO	London, England
WB	Washington, D.C.
UNEP	Nairobi, Kenya
WHO	Geneva, Switzerland
Regional Offices	
Africa	Brazzaville, Congo
Eastern Mediterranean	Alexandria, Egypt
Europe	Copenhagen, Denmark
Southeast Asia	New Delhi, India
Western Pacific	Manila, the Philippine Islands
Americas (PAHO)	Washington, D.C.
Area Offices	
I	Caracas, Venezuela
II	Mexico City, Mexico
III	Guatemala City, Guatemala
IV	Lima, Peru
V	Brasilia, Brazil
VI	Buenos Aires, Argentina
WMO	Geneva, Switzerland
FAO	Rome, Italy
IAEA	Vienna, Austria
UNESCO	Paris, France
IOC	Paris, France
ILO	Geneva, Switzerland

1/ See Appendix A for Abbreviations

POLICY ISSUE

This report ranks international organizations by their potential effectiveness in abating transnational pollution. This ranking is based on four tenets:

- Consider organizations with a small number of member nations first, for agreement and action are reached less effectively in international organizations with a large number of members where national interests are numerous.

- Consider organizations that represent industrialized and maritime nations first, for they are the primary source of pollution and have the means to abate pollution.

- Consider organizations unaffiliated with the UN first, for the UN's voting power is swayed away from pollution abatement in the interest of economic development.

- Consider organizations that represent the industrialized democracies before organizations that represent the Soviet Union and the socialist nations and these, in turn, before organizations that represent the developing nations, for this is the ranking of interest in pollution abatement.

The resulting ranking is:

1. Organization for Economic Cooperation and Development
2. North Atlantic Treaty Organization/Committee on the Challenges of Modern Society
3. European Communities (Common Market)
4. Council of Europe
5. Council for Mutual Economic Assistance
6. Organization of American States
7. United Nations Regional Commissions/Economic Commission for Europe
8. Intergovernmental Maritime Consultative Organization
9. World Bank Group
10. United Nations Environment Program
11. World Health Organization/Pan American Health Organization
12. World Meteorological Organization
13. Food and Agriculture Organization
14. International Atomic Energy Agency
15. United Nations Educational, Scientific, and Cultural Organization/ International Oceanographic Commission
16. International Labor Organization.

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POLICY ISSUE (continued)

The tenets were not verified. A disclaimer states that this approval does not necessarily signify the policies and views of EPA.

This survey concludes that international organizations do not publicly disclose evaluations of their effectiveness in abating pollution.